

# PATENT ABSTRACTS OF JAPAN

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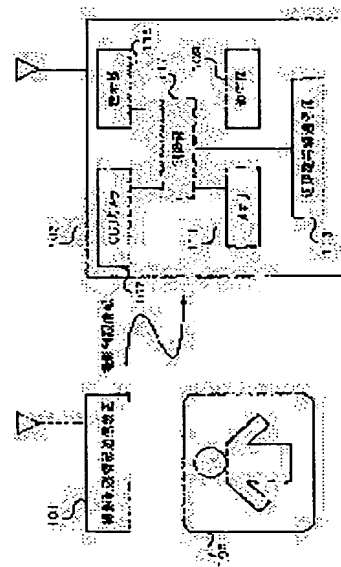
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(54) PHOTOGRAPHING DEVICE, PHOTOGRAPHING LIMIT SYSTEM, PHOTOGRAPHING WARNING SYSTEM, AND PHOTOGRAPHING LIMIT CANCEL SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To surely limit photographing within a photographing limited zone in a portable terminal having a photographing device or a photographing means.

SOLUTION: When a close-range radio communication part 113 is also turned on in the case of setting a mode of a portable communication terminal 103 to a photographing mode by turning on a CCD camera 107, the close-range radio communication part 113 is turned into standby state wherein photographing limit information transmitted from a photographing limit information transmitting apparatus 101 by radio can be received. When the close-range radio communication part 113 receives the photographing limit information except for "NO" photographing, based upon the photographing limit information, a control part 117 controls the CCD camera 107, so that an object 105 to be photographed is photographed with a photographing limit. When the close-range radio communication part 113 does not receive the photographing limit information in the standby state, under the control of the control part 117, ordinary photographing without photographing limit is performed by the CCD camera 107.



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CLAIMS

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[Claim(s)]

[Claim 1]

The photography means controlled electrically,

A signal receiving means to receive a signal from the equipment which the exterior left,

The photography control means which answers said control signal and controls photography actuation of said photography means, or the actuation relevant to photography when the signal outputted from said signal receiving means is a control signal about control of photography by said photography means,

Preparation \*\*\*\*\* equipment.

[Claim 2]

In photography equipment according to claim 1,

Photography equipment which said photography control means answers said control signal, and performs either of the accounting to the limit to the preservation or the external output to the memory in the ban on photography, a photography number-of-sheets limit, the flash plate disable at the time of photography, and the photography equipment of the photoed image data, and photography.

[Claim 3]

In photography equipment according to claim 1,

Photography equipment further equipped with a control information display means to display the information relevant to the control which answers the received control signal and said photography control means performs.

[Claim 4]

In photography equipment according to claim 1,

Photography equipment by which contiguity arrangement is carried out so that said camera part may also be covered with coincidence, if it has the camera part where it is required for the case of equipment to expose to the exterior at the time of photography, and the antenna part in which said control signal is accepted from the outside and this antenna part is covered with a signal shielding material.

[Claim 5]

In photography equipment according to claim 1,

Photography equipment of which said photography control means continues said control, and cancels this control after that after receiving a control signal until predetermined time passes.

[Claim 6]

It has photography equipment and the photography control signal sending set which transmits a photography control signal to said photography equipment,

Said photography equipment

The photography means controlled electrically,

A signal receiving means to receive a signal from the equipment which the exterior left,

The photography control means which answers said photography control signal and controls photography actuation of said photography means, or the actuation relevant to photography when the signal outputted from said signal receiving means is a photography control signal about

control of photography by said photography means transmitted from said photography control signal sending set,

The photography limit system which \*\*\*\*.

[Claim 7]

In a photography limit system according to claim 6,

The photography limit system by which said photography control signal sending set is arranged at near for [ on which the photography limit was imposed / taken a photograph ], or the inlet port of a space field [ exclusive ] on which the photography limit was imposed as a whole.

[Claim 8]

In a photography limit system according to claim 7,

The photography limit system have the photography limit discharge signal sending set which transmits a photography limit discharge signal so that said photography limit may be canceled when the photography equipment on which the photography limit was imposed by said photography means with the photography control signal transmitted to the outlet of said space field [ exclusive ] from said photography control signal sending set passes through said outlet.

[Claim 9]

The photography limit system which it has further in the photography limit modification signal sending set which transmits the modification signal for changing the photography limit imposed on said photography means by the photography control signal transmitted to each for [ which are arranged in said space field / exclusive / two or more / taken a photograph ] from said photography control signal sending set in claim 7 or the photography limit system according to claim 8 to said photography equipment.

[Claim 10]

It has photography equipment and the personal digital assistant which does not have a photography means,

Said photography equipment

The photography means controlled electrically,

A decision means for [ by which the photography limit was imposed on the photography actuation by said photography means / taken a photograph ] to judge whether it is a thing in the space field on which the photography limit was imposed,

A warning information transmitting means to turn predetermined warning information outside and to transmit when it judges that said decision means is a thing in the space field for [ on which the photography limit was imposed / taken a photograph ] on which the photography limit was imposed,

When said warning information is received from the exterior, based on this warning information, it has an information means by which a predetermined mode reports the purport made into the object taken a photograph, to the user of photography equipment,

Said personal digital assistant

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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

#### [0001]

#### [Field of the Invention]

This invention relates to amelioration of the technique for restricting effectively the photography actuation in the object and space field by the pocket communication terminal which built in photography means, such as photography equipments, such as a digital still camera (henceforth a "digital camera"), or a digital camcorder, and a digital camera, to which the photography limit was imposed.

#### [0002]

#### [Description of the Prior Art]

Development of the digital technique in recent years has had great effect on the technological innovation concerning a digital camera and a digital camcorder. In the digital camera, the high-performance-izing and miniaturization are progressing and pocket communication terminals, such as a portable telephone which contained the digital camera in connection with it, or a PHS terminal, are developed. Since it is possible to transmit the static-image data photoed with the digital camera and dynamic-image data to other pocket communication terminals etc. through a mobile communication network, the above-mentioned pocket communication terminal can also be made to demonstrate the function as a TV phone machine in this pocket communication terminal now. On the other hand, the above-mentioned video data is reproducible to the display of a pocket communication terminal, or the display of a personal computer terminal on real time with a digital camcorder by transmitting the photoed video data to other pocket communication terminals, personal computer terminals, etc. through a mobile communication network.

#### [0003]

#### [Problem(s) to be Solved by the Invention]

By the way, two or more facilities where photography of a movie theater, a theater, etc. on the Copyright Act is forbidden, and facilities where photography is forbidden from a viewpoint on defense of a bank etc. exist in a city with population accumulation of the magnitude beyond a fixed scale. Moreover, a management subject takes into consideration the bad influence to a player's play, the stress which an animal receives like facilities, such as various kinds of sport facilities and a zoo, and if possible, the facility it is considered that wants to forbid use of the flash plate at the time of photography also exists. Furthermore, it is predicted as that to which the management subject who thinks that he wants to charge a user on the occasion of the photography within the photography limit division in each [ these ] facility naturally also exists among management subjects of a facility like an art gallery or a museum.

#### [0004]

However, since the pocket communication terminal of the above-mentioned configuration is easy drag-in even if it is the small photography prohibition part which was sake [ the part ] for example, mentioned above, the object of the ban on photography steals and photographs (\*\*\*\*), and may be done by the user. Moreover, since proof of having \*\*\*\*(ed) when eliminating this image data from the above-mentioned digital camera does not remain after transmitting immediately the image data of the object of the ban on the photography which the user photoed

to another pocket communication terminal which exists in other locations, it is difficult to prove that the user performed \*\*\*\* in the photography prohibition part by the management subject side.

[0005]

In addition, constituting from a pocket communication terminal of the above-mentioned configuration so that a false shutter sound may be emitted from a pocket communication terminal at the time of photography as a means to prevent \*\*\*\*(ing) while the person itself [ this ] does not know in order to protect a person's (person taken a photograph) portrait rights made applicable to photography has reported to the perimeter that photography is performed. However, since the sound emitted from the above-mentioned pocket communication terminal at the time of photography cannot be set up not much greatly if the trouble to a perimeter is taken into consideration, it cannot be said that the (information to the person made applicable to photography) effectiveness is enough. Furthermore, although he is trying for a digital camcorder to report photoing near the camera lens section for light emitting diode (LED) etc. to the person taken a photograph by making light use and emit, for example at the time of photography, it is not taken into consideration about the \*\*\*\* prevention effectiveness.

[0006]

In a conventional pocket (digital camera was built in) communication terminal and the conventional conventional digital camcorder, it was difficult to ensure a photography limit of the ban on photography, the disable of a flash plate, etc., therefore it infringed on copyright or portrait rights, and had the trouble of the secrecy on defense being revealed so that clearly from the contents described above. moreover, the case where the person made applicable to photography with a digital camera, a digital camcorder, etc. is photoed — the information to perimeters including the person taken a photograph — inadequate — the person taken a photograph — while he did not know, it may have \*\*\*\*(ed).

[0007]

Therefore, the purpose of this invention is in the personal digital assistant which has photography equipment or a photography means to enable it to ensure the photography limit within a photography limit division.

[0008]

moreover, the thing it enables it to ensure information to perimeters including the person taken a photograph when another purpose of this invention photos the person made applicable to photography in the personal digital assistant which has photography equipment or a photography means — the person taken a photograph — while he does not know, it is in being made not to \*\*\*\*.

[0009]

[Means for Solving the Problem]

It answers to the above-mentioned control signal, and the photography equipment according to the 1st viewpoint of this invention has the photography control means control photography actuation of the above-mentioned photography means, or the actuation relevant to photography, when the signal outputted from the photography means controlled electrically, a signal receiving means receive the equipment which the exterior left to a signal, and the above-mentioned signal receiving means is a control signal about control of photography by the above-mentioned photography means.

[0010]

With the suitable operation gestalt concerning the 1st viewpoint of this invention, the above-mentioned photography control means answers the above-mentioned control signal, and performs either of the accounting to the limit to the preservation or the external output to the memory in the ban on photography, a photography number-of-sheets limit, the flash plate disable at the time of photography, and the photography equipment of the photoed image data, and photography.

[0011]

With another operation gestalt, the received control signal is answered and it has further a control information display means to display the information relevant to the control which the

above-mentioned photography control means performs.

[0012]

With the operation gestalt different from the above, it has the camera part where it is required for the case of equipment to expose to the exterior at the time of photography, and the antenna part in which the above-mentioned control signal is accepted from the outside, and if the antenna part is covered with a signal shielding material, contiguity arrangement is carried out so that the above-mentioned camera part may also be covered with coincidence.

[0013]

Moreover, with an operation gestalt different from the above, the above-mentioned photography control means continues the above-mentioned control, and cancels the control after that after receiving a control signal until predetermined time passes.

[0014]

The photography limit system according to the 2nd viewpoint of this invention It has photography equipment and the photography control signal sending set which transmits a photography control signal to the above-mentioned photography equipment. The above-mentioned photography equipment The photography means controlled electrically and a signal receiving means to receive a signal from the equipment which the exterior left, When the signal outputted from the above-mentioned signal receiving means is a photography control signal about control of photography by the above-mentioned photography means transmitted from the above-mentioned photography control signal sending set, The above-mentioned photography control signal is answered and it has the photography control means which controls photography actuation of the above-mentioned photography means, or the actuation relevant to photography.

[0015]

With the suitable operation gestalt concerning the 2nd viewpoint of this invention, the above-mentioned photography control signal sending set is arranged at near for [ on which the photography limit was imposed / taken a photograph ], or the inlet port of a space field [ exclusive ] on which the photography limit was imposed as a whole.

[0016]

another operation gestalt — the above — when the photography equipment on which the photography limit was imposed by the above-mentioned photography means with the photography control signal transmitted to the outlet of a space field [ exclusive ] from the above-mentioned photography control signal sending set passes through the above-mentioned outlet, it has the photography limit discharge signal sending set which transmits in a photography limit discharge signal so that the above-mentioned photography limit may be canceled.

[0017]

as another operation gestalt as the above — the above — it has further the photography limit modification signal sending set which transmits the modification signal for changing the photography limit imposed on the above-mentioned photography means by the photography control signal transmitted to each for [ which are arranged in the space field / exclusive / two or more / taken a photograph ] from the above-mentioned photography control signal sending set to the above-mentioned photography equipment.

[0018]

The photography warning system according to the 3rd viewpoint of this invention It has photography equipment and the personal digital assistant which does not have a photography means. The above-mentioned photography equipment A decision means for [ by which the photography limit was imposed on the photography actuation by the photography means controlled electrically and the above-mentioned photography means / taken a photograph ] to judge whether it is a thing in the space field on which the photography limit was imposed, When it judges that the above-mentioned decision means is a thing in the space field for [ on which the photography limit was imposed / taken a photograph ] on which the photography limit was imposed, A warning information transmitting means to turn predetermined warning information outside and to transmit, and when the above-mentioned warning information is received from the exterior, Based on the warning information, it has an information means by which a predetermined mode reports the purport made into the object taken a photograph, to the user of

photography equipment. The above-mentioned personal digital assistant When the above-mentioned warning information is received from the above-mentioned photography equipment, based on the warning information, it has an information means by which a predetermined mode reports the purport made into the object taken a photograph, to the user of a personal digital assistant.

[0019]

The photography restraint release system according to the 4th viewpoint of this invention It has the server which delivers and receives information between photography equipment and the above-mentioned photography equipment which exists in the space field on which the photography limit was imposed. The above-mentioned photography equipment A decision means by which the space field for [ which the above-mentioned photography means tends to photo / taken a photograph ] judges whether the photography limit is imposed based on the photography means controlled electrically and the information given from the outside, When it judges that the photography limit is imposed on the above-mentioned decision means and conditions required to photography limit discharge are shown from a discharge demand transmitting means to transmit the discharge demand of a photography limit to the above-mentioned server, and the above-mentioned server, An activation means to perform processing for fulfilling the condition, and when the notice of photography limit discharge is given from the above-mentioned server, It has a photography limit discharge means to cancel the limit imposed on photography actuation of the above-mentioned photography means. The above-mentioned server When the notice of a purport which fulfilled the conditions for a presentation means to receive the photography limit discharge demand from the above-mentioned photography equipment, and to show the conditions for photography limit discharge, and the above-mentioned photography limit discharge from the above-mentioned photography equipment is, When a verification means to verify whether the condition was fulfilled, and the above-mentioned verification means verify that the above-mentioned conditions are fulfilled, it has a notice means of photography limit discharge to notify the notice of a purport which cancels the above-mentioned photography limit to the above-mentioned photography equipment.

[0020]

[Embodiment of the Invention]

Hereafter, a drawing explains the gestalt of operation of this invention to a detail.

[0021]

Drawing 1 is the block diagram showing the 1st operation gestalt of the photography limit system according to this invention.

[0022]

The above-mentioned photography limit system is built in the facility where photography of a movie theater, a theater, etc. on the Copyright Act is forbidden, the facility where photography is forbidden from a viewpoint on defense like a bank, and as shown in drawing 1 , it is equipped with the photography limit information sending set 101 and the pocket communication terminal 103. The photography limit information sending set 101 is arranged near the body 105 taken a photograph, and carries out wireless transmission of the photography limit information about the bodies 105 taken a photograph, such as a limit of photography good / non-information, and photography number of sheets, and flash plate use good / no. If it puts in another way, the photography limit of photography "no", photography number of sheets "a limit", flash plate use "no", etc. will be beforehand imposed on the body 105 taken a photograph. In addition, although the photography limit information sending set 101 is not indicated to drawing 1 , it shall contain the memory which stores the above-mentioned photography limit information beforehand, the radio transmitter for carrying out wireless transmission of the above-mentioned photography limit information stored in this memory, and the control section for controlling these. On the other hand, it the pocket communication terminal 103 which receives photography limit information etc. is not only equipped with the communications department 109, memory 111, the short-distance Radio Communications Department 113, a display 115, and a control section 117, but builds in a digital camera 107, i.e., a CCD camera, further.

[0023]



In the pocket communication terminal 103, CCD camera 107 photos the body 105 taken a photograph under control of a control section 117. Information is delivered [ the communications department 109 ] and received through a mobile communication network under control of a control section 117 between other pocket communication terminals (not shown), an information processing terminal (personal computer terminal) (not shown), etc. Memory 111 memorizes the image data which contains the body 105 which CCD camera 107 photoed taken a photograph under control of a control section 117, the data of everything that received from other pocket communication terminals (not shown) etc. through the mobile communication network by the communications department 109, etc.

[0024]

The short-distance Radio Communications Department 113 transmits the data of everything that was read from memory 111 by the control section 117 under control of a control section 117 by direct non-contact to other pocket communication terminals which exist at a short distance from the pocket communication terminal 103, without minding the above-mentioned mobile communication network (not shown). Moreover, under control of a control section 117, the short-distance Radio Communications Department 113 receives the photography limit information about the above-mentioned body 105 by which wireless transmission is carried out from the photography limit information sending set 101 taken a photograph, and outputs this photography limit information to memory 111 through a control section 117. With this operation gestalt, Blue tooth (Bluetooth) (trademark of Blue tooth SIG, Inc, and USA) is used for the short-distance Radio Communications Department 113.

[0025]

A display 115 displays the image data which contains the body 105 which CCD camera 107 photoed taken a photograph under control of a control section 117, the data of everything that the communications department 109 received from other pocket communication terminals etc. through the mobile communication network (not shown), etc. in a predetermined display mode. A control section 117 controls CCD camera 107, the communications department 109, memory 111, the short-distance Radio Communications Department 113, and a display 115.

[0026]

Next, in the photography limit system of the above-mentioned configuration, the processing flow in the case of photoing the body 105 (the photography limit of photography "no", photography number of sheets "a limit", flash plate use "no", etc. being beforehand imposed, as mentioned above) taken a photograph using the pocket communication terminal 103 (CCD camera 107) is explained.

[0027]

In drawing 1 , the photography limit information sending set 101 is carrying out wireless transmission of the photography limit information (namely, information on the photography "no" about the body 105 taken a photograph, photography number of sheets "a limit", or flash plate use "no") about the body 105 taken a photograph which was mentioned above continuously or intermittently. On the other hand, in the pocket communication terminal 103 side, if it is made an ON state also about the short-distance Radio Communications Department 113 in case a user makes CCD camera 107 an ON state and sets the mode of this pocket communication terminal 103 as photography mode, thereby, the short-distance Radio Communications Department 113 will be in the standby condition that the photography limit information by which wireless transmission is carried out and which was mentioned above is receivable from the photography limit information sending set 101.

[0028]

In this standby condition, if the short-distance Radio Communications Department 113 receives photography limit information other than the above-mentioned photography "no", a control section 117 will photo the body 105 taken a photograph with a photography limit by controlling CCD camera 107 based on this photography limit information. In addition, in the above-mentioned standby condition, when the short-distance Radio Communications Department 113 does not receive the above-mentioned photography limit information, the usual photography without a photography limit by the pocket communication terminal 103 (CCD camera 107) is

performed under control of a control section 117. Photography limits other than photography "no" are explained according to an individual below, respectively.

[0029]

When the body 105 taken a photograph is the ban on photography when the control section 117 has recognized that the photography limit information mentioned above is photography "no" that is, a control section 117 outputs the command for forbidding photography actuation to CCD camera 107. Or the technique of forbidding the writing by the control section 117 to the memory 111 of the image data containing the body 105 which CCD camera 107 photoed taken a photograph may also be assumed, without forbidding photography actuation of CCD camera 107.

[0030]

Next, when the control section 117 has recognized that the photography limit information mentioned above is the photography number of sheets "a limit" about the body 105 taken a photograph, a control section 117 adds the number of sheets of the image data which CCD camera 107 photoed. And if it recognizes that the aggregate value reached the photography limit number of sheets of the body 105 set up beforehand taken a photograph, a control section 117 will control CCD camera 107 that the photography actuation by CCD camera 107 should be forbidden.

[0031]

Next, when a control section 117 has recognized that the command of the purport which should display the contents of a photography limit concerning the body 105 taken a photograph into the photography limit information which mentioned above in addition to the above-mentioned photography number-of-sheets "limit" information, flash plate use "no" information, etc. is included, a control section 117 displays the information control a display 115 and start to the above-mentioned contents of a photography limit to a display 115 based on the above-mentioned command. Moreover, when the control section 117 has recognized that the command of the purport as which the photography limit information mentioned above should display the ban on photography of the body 105 taken a photograph in addition to photography "no" information, i.e., the information on a purport that the body 105 taken a photograph is the ban on photography, is included, a control section 117 displays the information control a display 115 and start to the ban on the above-mentioned photography to a display 115 based on the above-mentioned command.

[0032]

In this case, as mentioned above, it is performed any of prohibition of the write-in actuation to the memory 111 by control-section 117 self of the image data which whether photography actuation of CCD camera 107 being forbidden by the control section 117 and CCD camera 107 photoed they are. However, it may be made to carry out only the processing actuation displayed to a display 111 in the purport whose body 105 taken a photograph is the ban on photography as processing actuation for warning of the purport whose body 105 taken a photograph is the ban on photography to a user, without a control section 117 performing prohibition of these photography actuation, or prohibition of photography related actuation.

[0033]

In addition, if it is set as the level which this user's pocket communication terminal 103 cannot receive unless the range within several m radius is approached from the body 105 which the user mentioned above taken a photograph, malfunction of the pocket communication terminal 103 in the case of photoing things other than taken a photograph body 105 near the body 105 taken a photograph can be reduced for the transmission level of the photography limit information by which wireless transmission is carried out from the photography limit information sending set 101. Moreover, when using the photography limit information sending set 101 which set the wireless transmission level of photography limit information as a facility like a movie theater where the photography limit (ban on photography) is imposed by the whole in the hall one low as mentioned above, it can cope with by installing two or more photography limit information sending sets 101 to two or more proper parts in the hall, respectively so that the above-mentioned pocket communication terminal 103 may receive the above-mentioned photography limit information also in which a location in the hall.

[0034]

In addition, in the pocket communication terminal 103, it is possible to cope with it by considering the pocket communication terminal 103 as the following configurations about the injustice which prevents from performing a photography limit as the short-distance Radio Communications Department 113 cannot receive photography limit information from the photography limit information sending set 101 by covering parts other than CCD camera 107 with the ingredient which covers an electric wave. That is, if CCD camera 107 which is the camera part where it is required at the time of photography to expose to the exterior from the case of the pocket communication terminal 103, and the antenna part of the short-distance Radio Communications Department 113 which receives photography limit information from the photography limit information sending set 101 cover this antenna part with an electric-wave shielding material, it will be the configuration that contiguity arrangement of CCD camera 107 with which CCD camera 107 is also covered with coincidence, and the antenna part is carried out in the case of the pocket communication terminal 103. If even CCD camera 107 does not cover CCD camera 107 and the antenna part of the short-distance Radio Communications Department 113 with the above-mentioned electric-wave shielding material by carrying out contiguity arrangement in the case of the pocket communication terminal 103, it becomes impossible as mentioned above, to cover the electric wave of the photography limit information which is going to carry out incidence to the short-distance Radio Communications Department 113. Moreover, even if it is the case where wireless LAN is used, as the short-distance Radio Communications Department 113, the same effectiveness as the above is acquired, and even if it is the data communication by infrared radiation like [ other than an electric wave (for example, I r D A) (brief sketch of Infrared Data Association) ], the same effectiveness as the above is acquired.

[0035]

As explained above, according to the 1st operation gestalt of the photography limit system according to this invention The photography limit information by which wireless transmission is carried out from the photography limit information sending set 101 is received in the short-distance Radio Communications Department 113 which prepared for the pocket communication terminal 103. By considering as the configuration outputted to the control section 117 for controlling each part of the pocket communication terminal 103 A photography limit of a movie theater, a theater, the ban on the photography within [ , such as a bank, ] a photography limit division, the disable of a flash plate, etc. can make it possible to carry out easily and certainly in the pocket communication terminal 103 which has a photography function. Therefore, it can infringe on individual portrait rights, copyright, etc., or troubles, like the secrecy on the defense in facilities, such as a bank, leaks can be improved. Furthermore, it is also possible to charge easily to photography of various kinds of works of art in facilities, such as an art gallery. In addition, with this operation gestalt, although the photography limit information sending set 101 was explained as what is arranged near the body 105 taken a photograph, the official in charge of a facility etc. may be carrying it. Moreover, this operation gestalt is applicable not only to the pocket communication terminal 103 which built in CCD camera 107 but a digital camcorder.

[0036]

Drawing 2 is the block diagram showing the 2nd operation gestalt of the photography limit system according to this invention.

[0037]

the above-mentioned photography limit system — for example, the pocket communication terminal 103 which the area of all abbreviation in a facility like a movie theater or a theater is built in the facility set as photography limit (prohibition) area, and was shown in drawing 1 and the body 105 taken a photograph — in addition, it has the photography limit information sending set 123 and the reset-signal transmitter 125.

[0038]

As the function of the photography limit information sending set 101 of a publication and abbreviation identitas is achieved to drawing 1 and it is shown to drawing 2 , the photography limit information sending set 123 is arranged near inlet-port 121a of the photography prohibition

area 121, or this inlet-port 121a, and carries out wireless transmission to the pocket communication terminal 103 in the photography prohibition area 121 continuously or intermittently in the above-mentioned photography limit information. The photography limit information sending set 123 contains the control section 131 for controlling the memory 127 which stores the above-mentioned photography limit information beforehand, the radio transmitter 129 for carrying out wireless transmission of the above-mentioned photography limit information stored in this memory 127, and memory 127 and a radio transmitter 129.

[0039]

On the other hand, the reset-signal transmitter 125 is arranged near outlet 121b of the photography prohibition area 121, or this outlet 121b, and carries out wireless transmission of the reset signal at this pocket communication terminal 103 that the photography limit imposed on the above-mentioned pocket communication terminal 103 in the photography prohibition area 121 using the photography limit information from the photography limit information sending set 121 should be reset.

[0040]

Next, in the photography limit system of the above-mentioned configuration, when the user who carried the above-mentioned pocket communication terminal 103 enters the above-mentioned photography prohibition area 121, the processing actuation which each part of a system performs is explained.

[0041]

In drawing 2, if the user who carried the above-mentioned pocket communication terminal 103 is going to come in in the photography limited area 121 from inlet-port 121a, it will be received by the short-distance Radio Communications Department 113 of the pocket communication terminal 103, and the above-mentioned (the body 105 taken a photograph is started) photography limit information from the radio transmitter 129 of the photography limit information sending set 123 will download in the memory 111 of the pocket communication terminal 103. Even if a user is going to photo the body 105 taken a photograph and makes CCD camera 107 an ON state by this since a control section 117 will control photography actuation of CCD camera 107 based on the above-mentioned photography limit information in memory 111 when a user takes a photograph using the above-mentioned pocket communication terminal 103 within the photography limited area 121, effective photography actuation of CCD camera 107 is regulated by the control section 117.

[0042]

Next, if the above-mentioned user is going to participate from the photography limited area 121 to the exterior through outlet 121b, it will be received by the short-distance Radio Communications Department 113 of the pocket communication terminal 103, and the above-mentioned reset signal from the reset-signal transmitter 125 will be transmitted to a control section 117 from the short-distance Radio Communications Department 113. By reading the above-mentioned reset signal, a control section 117 resets the above-mentioned photography limit information stored in memory 111.

[0043]

By the way, in the above-mentioned photography limit system, if the reset signal from the reset-signal transmitter 125 is not received by the short-distance Radio Communications Department 113 of the pocket communication terminal 103 even when the user who carried the pocket communication terminal 103 passes outlet 121b and participates from the photography limited area 121 to the exterior, the above-mentioned photography limit imposed on the pocket communication terminal 103 is not reset. Therefore, when the above-mentioned user participates out of the photography limited area 121, the pocket communication terminal 103 received the reset signal from the reset-signal transmitter 125, and not gone out, the fault that the condition that the photography limit was imposed on the pocket communication terminal 103 out of the photography limited area 121 continues will arise.

[0044]

It is made to carry out wireless transmission also of the initiation command of operation. then, the photography limit information sending set 123 to photography limit information — a time

check — the pocket communication terminal 103 which passed inlet-port 121a with the user — this time check — the time of receiving an initiation command of operation with the above-mentioned photography limit information — a control section 117 — a time check — actuation being started, and, when the measured time amount value reaches the time amount value set up beforehand Also when resetting the photography limit imposed on the pocket communication terminal 103 and the pocket communication terminal 103 is not able to receive the reset signal from the reset-signal transmitter 125, generating of the above faults can be prevented.

[0045]

As explained above, according to the 2nd operation gestalt of the photography limit system according to this invention For example, it sets to inlet-port 121a of the facility where the area of all abbreviation in a facility like a movie theater or a theater is set as the photography limit (prohibition) area 121. In order that photography limit information may download photography limit information from the photography limit information sending set 123 uniformly to all the pocket communication terminals 103 that pass inlet-port 121a, Since it is not necessary to form a photography limit information sending set (123) for every body taken [ by which the same effectiveness as abbreviation is acquired also in the 1st operation gestalt mentioned above, and also the photography limit is carried out ] a photograph, the structure of a system can be simplified and a cost fall can also be aimed at.

[0046]

Furthermore, since photography of the body 105 taken a photograph can be permitted to this user and it can restrict also about the photography number of sheets of the body 105 taken a photograph when the photography tariff to the body 105 taken a photograph is paid to a facility management person in case a user is going to enter the photography limited area 121, it can also charge to photography of the body 105 with which the photography limit was imposed taken a photograph. In addition, without restricting only to the time when a user passes inlet-port 121a, even if it performs download of the photography limit information from the photography limit information sending set 123 here and there in the photography limit (prohibition) area 121, it does not interfere. In addition, this operation gestalt is applicable not only to the pocket communication terminal 103 which built in CCD camera 107 but a digital camcorder.

[0047]

Drawing 3 is the block diagram showing the 3rd operation gestalt of the photography limit system according to this invention.

[0048]

In the above-mentioned photography limit system, as shown in drawing 3 , in the point (only one piece has indicated both the body 105 taken a photograph and the photography limit Make Changes information sending set 133 at a time on account of illustration) of having installed the photography limit Make Changes information sending set 133 every body 105 taken [ on which the photography limit in the photography limited area 121 was imposed ] a photograph, it is [ drawing 2 ] different with the system of a publication. About other configurations, it is the same also in a system given in drawing 2 . Each photography limit Make Changes information sending set 133 transmits the photography limit Make Changes information for adding modification to the contents of the photography limit information uniformly downloaded from the photography limit information sending set 123 to the pocket communication terminal 103 of the user who passes inlet-port 121a. Notice information for the body [ / other than photography limit Make Changes information ] (105) taken a photograph to notify the purport by which the photography limit is carried out to the pocket communication terminal 103 also carries out wireless transmission of each photography limit Make Changes information sending set 133.

[0049]

If it puts in another way, in case a user will photo the body (105) with which the photography limit is imposed using the pocket communication terminal 103 taken a photograph in the above-mentioned system By receiving the photography limit Make Changes information from a photography limit Make Changes information sending set (133) that the pocket communication terminal 103 corresponds, and adding this modification information to photography limit information from the photography limit information sending set 123 It enables it to change the

contents of a photography limit into every body (105) taken a photograph.

[0050]

Next, the flow chart of drawing 4 explains processing actuation of each part in the photography limit system of the above-mentioned configuration.

[0051]

In drawing 4, if the user who carried the pocket communication terminal 103 is going to come in in the photography limited area 121 from inlet-port 121a, it will be received by the short-distance Radio Communications Department 113 of the pocket communication terminal 103, and the above-mentioned photography limit information from the radio transmitter 129 of the photography limit information sending set 123 will download in the memory 111 of the pocket communication terminal 103 (step S141). By next, the thing for which the body (105) which a user wants to photo in the photography limited area 121 taken a photograph was found out For example, if the notice of a purport by which the carbon button for CCD camera starting (not shown) in the control unit (not shown) of the pocket communication terminal 103 was operated can be received from the above-mentioned control unit (it is Yes at step S142) A control section 117 controls CCD camera 107 to an ON state, and sets the pocket communication terminal 103 as photography mode (step S143).

[0052]

Next, a control section 117 also controls the short-distance Radio Communications Department 113 to an ON state, and changes it into the standby condition that the photography limit Make Changes information from the photography limit Make Changes information sending set (133) corresponding to the body (105) which is a candidate for photography taken a photograph is receivable (step S144). In this standby condition, the pocket communication terminal 103 performs photography of the body (105) taken a photograph under the conditions which added the contents of the above-mentioned photography limit Make Changes information to the photography limit information downloaded from the photography limit information sending set 123 at Yes) and step S141 by the (step S145 when the short-distance Radio Communications Department 113 received photography limit Make Changes information (step S146).

[0053]

On the other hand, in the above-mentioned standby condition, when the short-distance Radio Communications Department 113 does not receive photography limit Make Changes information, based on the photography limit information downloaded from the photography limit information sending set 123, the pocket communication terminal 103 performs photography of the body (105) taken a photograph by No) and step S141 at the (step S145 (step S147). In addition, the processing actuation from step S142 to step S146 or step S147 is continued until a certain actuation which a user — for example, the above-mentioned carbon button for CCD camera starting (not shown) is turned OFF by the user — can presume to be those with an intention which participate outside from the photography limited area 121 is made (being step S148 No).

[0054]

Next, if the above-mentioned user checks the intention which is going to participate from the photography limited area 121 to the exterior through outlet 121b (it is Yes at step S148), it will be received by the short-distance Radio Communications Department 113 (step S149), and the above-mentioned reset signal from the reset-signal transmitter 125 will be outputted to a control section 117 from the short-distance Radio Communications Department 113. By reading the above-mentioned reset signal, a control section 117 resets the above-mentioned photography limit information stored in memory 111 (step S150).

[0055]

As explained above, according to the 3rd operation gestalt of the photography limit system according to this invention The same effectiveness is acquired also in the 2nd operation gestalt, and also the photography limit Make Changes information sending set 133 is installed in each body (105) of every taken a photograph. In case a user is going to photo each body (105) taken a photograph using the pocket communication terminal 103 Since the photography limit Make Changes information from the photography limit Make Changes information sending set (133) corresponding to this body (105) taken a photograph is received, it is possible to change the

contents of a photography limit into each body (105) of every taken a photograph into the photography limited area 121. In addition, this operation gestalt is applicable not only to the pocket communication terminal 103 which built in CCD camera 107 but a digital camcorder.  
[0056]

Drawing 5 is the block diagram showing 1 operation gestalt of the photography warning system according to this invention.

[0057]

The above-mentioned photography warning system consists of a pocket communication terminal 103 which built in the digital camera, i.e., a CCD camera, and a pocket communication terminal 153 which does not build in the digital camera (CCD camera), as shown in drawing 5. Except for the point that only the pocket communication terminal 103 builds in CCD camera 107, both internal configurations of the pocket communication terminal 103 and the pocket communication terminal 153 are the same. That is, both the pocket communication terminals 103 and 153 build in the communications department 109 which achieves a function which was explained by drawing 1 thru/or drawing 3, respectively, memory 111, the short-distance Radio Communications Department 113, the display 115, and the control section 117.

[0058]

In addition, as mentioned above, Blue tooth (Bluetooth) (trademark of Blue tooth SIG, Inc, and USA) is used, and if the short-distance Radio Communications Department 113 makes an ON state continue, it will continue transmitting continuously the information on a purport (photography actuation initiation information) that the pocket communication terminal 103 should start photography actuation after this on the outskirts in the short-distance Radio Communications Department 113. On the other hand, when the ON state of the short-distance Radio Communications Department 113 is made intermittent, the above-mentioned photography actuation initiation information will be intermittently transmitted on the outskirts.

[0059]

Next, in the photography warning system of the above-mentioned configuration, when the user who carried the above-mentioned pocket communication terminal 103 is going to take a photograph and photography limit (prohibition) area is entered, the processing actuation which each part of a system performs is explained.

[0060]

In drawing 5, if it is made an ON state also about the short-distance Radio Communications Department 113 in case the user who carries the pocket communication terminal 103 makes CCD camera 107 an ON state and sets the mode of this pocket communication terminal 103 as photography mode, thereby, the short-distance Radio Communications Department 113 will transmit photography actuation initiation information on the outskirts continuously or intermittently.

[0061]

On the other hand, the user who is carrying the pocket communication terminal 153 receives continuously or intermittently the photography actuation initiation information by which makes an ON state the short-distance Radio Communications Department 113 continuously or intermittently, and wireless transmission is carried out continuously or intermittently from the short-distance Radio Communications Department 113 by the side of the above-mentioned pocket communication terminal 103, and this photography actuation initiation information is outputted to a control section 117. A control section 117 will control the loudspeaker (not shown) built in the pocket communication terminal 153, if this photography actuation initiation information is read. Emit a predetermined beep sound from this loudspeaker (not shown), or A display 115 is controlled. Display a predetermined warning message on a display 115, or It is made to recognize to the user who carries the pocket communication terminal 153 by starting the vibration device (not shown) with which the pocket communication terminal 153 is equipped etc. that photography tends to be performed in near.

[0062]

In addition, if the above-mentioned pocket communication terminal 103 is constituted on the occasion of photography actuation of the pocket communication terminal 103 so that a false

shutter sound may also be emitted with wireless transmission of the above-mentioned photography actuation initiation information, the purport by which photography actuation will be started from now on can be made to recognize also to the user who is not carrying the pocket communication terminal 153. Moreover, it is also possible to constitute this digital instrument so that wireless transmission can perform warning information on a purport that photography actuation is performed continuously or intermittently during photography actuation, from this digital motion picture camera machine to the digital motion picture camera machine which can perform continuous photography actuation like a video camera.

[0063]

As explained above, according to 1 operation gestalt of the photography warning system according to this invention When it is going to take a photograph using CCD camera 107 of the pocket communication terminal 103 which the user is carrying, in order that the body (105) taken a photograph, other persons, etc. may prevent being stolen, photographed and carried out, While emitting a predetermined sound at the time of photography actuation etc., the above-mentioned photography actuation initiation information etc. by carrying out wireless transmission around the pocket communication terminal 103 through the short-distance Radio Communications Department 113 It is possible to make surrounding people etc. recognize more certainly warning of the purport by which photography actuation will be started from now on. Therefore, before the person made applicable to photography notices at all, fault which is photographed [ is stolen and ] and carried out can be prevented.

[0064]

Drawing 6 is the explanatory view showing an example applied to the location which should regulate unconditional photography [ in / for the photography limit system according to this invention / the outdoors ].

[0065]

In the example shown in drawing 6 , it considers as the location which should regulate the unconditional photography in the outdoors, and the beach which is crowded with the young women (155, 157, 159, 161, 163) of large number of people's swimming suit figure like the Shonan seashore of midsummer is assumed. Moreover, in this system, the pocket communication terminal 173 of a configuration of also having the GPS antenna 169 which receives the electric wave from two or more GPS Satellites (165 167), and GPS receiver 171 which acquires positioning information from the received this electric wave in addition to the configuration of the pocket communication terminal 103 mentioned above is adopted.

[0066]

When it is shown that a user's current position where the positioning information from GPS receiver 171 is carrying the pocket communication terminal 173 is the Shonan seashore, a control section 117 forbids the write-in actuation to the memory 111 by control-section 117 self of the image data which forbade photography actuation of CCD camera 107, or CCD camera 107 photoed like previous statement. Since it can prevent that the young woman (155-163) of a swimming suit figure is photoed without any restriction by the third person without notice by this, the portrait rights of the young woman (155-163) of these swimming suit figure are protected.

[0067]

in addition, the above — a young woman (155-163) is able to prevent separately theft \*\*\*\* of the swimming suit figure of these young women by the pocket communication terminal 103 of the user who approached these young women to fixed distance by carrying the photography limit information sending set 101 as shown by drawing 1 etc., and carrying out wireless transmission of the photography limit information which was mentioned above continuously or intermittently from the photography limit information sending set 101 In addition, although the example shown in drawing 6 explained the photography actuation using the pocket communication terminal 103 which built in CCD camera 107, in the example shown in drawing 6 , the photography limit is possible like [ actuation / in the case of using a digital camcorder / photography ] the above.

[0068]

Drawing 7 is the explanatory view showing another example applied to the location which should



regulate unconditional photography [ in / for the photography limit system according to this invention / the outdoors ].

[0069]

In the example shown in drawing 7 , it considers as the location which should regulate the unconditional photography in the outdoors, and the test course of the new model under management of an automaker is assumed. Moreover, in this system, to each new model (177) which runs a test course 175, the photography limit information sending set 101 as shown by drawing 1 was carried, and theft \*\*\*\* of each new model (177) by the pocket communication terminal 103 of the user who approached the test course 175 to fixed distance is regulated by carrying out wireless transmission of the photography limit information which was mentioned above continuously or intermittently from the photography limit information sending set 101. Furthermore, in order to provide this system with various information by radio to each pocket communication terminal (103) which is going to photo each above-mentioned new model (177), the server 179 is installed in the bottom of management of an automaker.

[0070]

Drawing 8 is a flow chart which shows processing actuation of each part in a photography limit system given in drawing 7 .

[0071]

In drawing 8 , if the pocket communication terminal 103 (short-distance Radio Communications Department 113) of the user who approached the test course 175 to fixed distance receives photography prohibition information as photography limit information from the photography limit information sending set 101 carried in the new model 177 (it is Yes at step S181), it will be confirmed whether CCD camera 107 performed photography actuation by actuation of a user (step S182). If it judges that CCD camera 107 performed photography actuation as a result of this check (it is Yes at step S182), a control section 117 will stop the processing which writes the image information from CCD camera 107 in memory 111 (step S183).

[0072]

Next, it is confirmed whether an automaker's commercial image information own [ as for the control section 117 / this ] where the short-distance Radio Communications Department 113 displayed the price of a new model (177) in the title from the server (it is hereafter written as a "server") 179 of an automaker was received (step S184). if it checks that the short-distance Radio Communications Department 113 has received the above-mentioned commercial image information as a result of this check (it is Yes at step S184) — the above-mentioned commercial image information — a display 115 — displaying (step S185) — "1" is added to the number counter of reception set up in memory 111. Next, a control section 117 checks whether the number of reception of the commercial image information which the short-distance Radio Communications Department 113 received has reached the predetermined number set up beforehand by checking the counted value of the above-mentioned number counter of reception (step S186). If the number of reception of commercial image information has not reached a predetermined number as a result of this check (it is No at step S186), it returns to processing actuation of step S181.

[0073]

On the other hand, if the number of reception of commercial image information has reached the predetermined number as a result of the above-mentioned check (it is Yes at step S186), a control section 117 will reset the counted value of the above-mentioned number counter of reception while notifying the purport that the number of reception of commercial image information reached the predetermined number to a server 179 through the short-distance Radio Communications Department 113 (step S187). And when the notice of invitation at a new car trial ride meeting from a server 179 is, a control section 117 will receive this notice through the short-distance Radio Communications Department 113 (step S188). If the above-mentioned photography limit information is not received, a control section 117 controls CCD camera 107 by step S181 so that the pocket communication terminal 103 (CCD camera 107) can perform the usual photography without a photography limit (step S189).

[0074]

In addition, the commercial image information by which wireless transmission is carried out is not limited to the pocket communication terminal 103 from a server 179 at step S184 by an automaker's own thing mentioned above, and even if it is the commercial image information by the request from the company of another type of industry, it does not interfere. In this case, naturally this automaker can get an advertising rate income from the company which requested the advertisement. Although drawing 7 and the example shown in drawing 8 explained the photography actuation using the pocket communication terminal 103 which built in CCD camera 107, in drawing 7 and the example shown in drawing 8, the same processing actuation as the above is possible also about the photography actuation using a digital camcorder.

[0075]

Drawing 9 is the explanatory view showing an example of the commercial system to offer information using the pocket communication terminal according to this invention.

[0076]

It consists of systems shown in drawing 9 so that wireless transmission of the commercial information which requires for 0000 cameras 191 the user who carried the pocket communication terminal 103 from the server 193 currently installed in the inside of a shop of 0000 cameras 191 by using the pocket communication terminal 103 (CCD camera 107), and performing photography actuation while passing through in front of the store [ of 0000 cameras 191 which are mass retailers, such as home electronics, ] may be carried out as image information at the pocket communication terminal 103.

[0077]

Drawing 10 is a flow chart which shows processing actuation of each part in a commercial system to offer information given in drawing 9.

[0078]

In drawing 10, if the current position of the user who carried the pocket communication terminal 103 is outside a photography restricted area like previous statement, the short-distance Radio Communications Department 113 will not receive the photography limit information from the photography limit information sending set 101 as shown by drawing 1 (being step S201 Yes). Therefore, a control section 117 controls CCD camera 107 so that the pocket communication terminal 103 (CCD camera 107) can perform the usual photography without a photography limit. Next, a control section 117 confirms whether the user performed photography actuation near the 0000 above-mentioned camera 191 using CCD camera 107 (step S202). If it judges that photography actuation was performed as a result of this check (it is Yes at step S202), as for a control section 117, the short-distance Radio Communications Department 113 will confirm whether the commercial image information from the server 193 of the 0000 above-mentioned camera 191 was received (step S203).

[0079]

if it checks that the short-distance Radio Communications Department 113 has received the above-mentioned commercial image information as a result of this check (it is Yes at step S203) — the above-mentioned commercial image information — a display 115 — displaying (step S204) — "1" is added to the count counter of reception set up in memory 111. Next, a control section 117 confirms whether the count of reception of the commercial image information which the short-distance Radio Communications Department 113 received became the count of predetermined set up beforehand by checking the counted value of the above-mentioned count counter of reception (step S205). If the count of reception of commercial image information has not become the count of predetermined as a result of this check (it is No at step S205), it returns to processing actuation of step S201.

[0080]

On the other hand, if the count of reception of commercial image information has become the count of predetermined as a result of the above-mentioned check (it is Yes at step S205), a control section 117 will reset the counted value of the above-mentioned count counter of reception while the count of reception of commercial image information notifies the purport that the count of predetermined was become to a server 193 through the short-distance Radio Communications Department 113 (step S206). And if the short-distance Radio Communications

Department 113 receives the notice of point addition for a user to receive offer of the premium (for example, premium) from 0000 cameras 191 from a server 193 (step S207), a control section 117 will add the notified point size to the point size counter set up in memory 111 (step S208).  
[0081]

Next, if the short-distance Radio Communications Department 113 receives the notice of premium offer from a server 193, the counted value of the above-mentioned point size counter will be reset, and a series of processing actuation will be ended (step S209). If the above-mentioned photography limit information is received, CCD camera 107 will be controlled by step S201 so that a control section 117 cannot perform the usual photography in response to the photography limit based on the above-mentioned photography limit information in the pocket communication terminal 103 (CCD camera 107) (step S210). In addition, the commercial image information by which wireless transmission is carried out is not limited to the pocket communication terminal 103 by the thing of 0000 camera 191 self mentioned above from a server 193 at step S203, and even if it is the commercial image information by the request from another company, it does not interfere. In this case, naturally 0000 cameras 191 can obtain an advertising rate income from the above-mentioned company which requested the advertisement. Although drawing 9 and the system shown in drawing 10 explained as using the pocket communication terminal 103 which built in CCD camera 107, the processing actuation same also as replacing with the pocket communication terminal 103 and using a digital camcorder as the above is possible.

[0082]

Drawing 11 is the explanatory view showing an example of the photography restraint release system using the pocket communication terminal according to this invention.

[0083]

[ in the art gallery 211 which is a photography restricted area in the system shown in drawing 11 , for example ] The pocket communication terminal 103 which a user carries receives the notice of the photography authorization from the server 213 installed in an art gallery 211. And by notifying the purport which completed the predetermined procedure for this user to pay the photography tariff charged using the pocket communication terminal 103 to a server 213, it is constituted so that photography of the work of art of the pictures 215 grade which is a body taken a photograph may begin and it may become possible. Moreover, edit into picture postcards, and it prints out in the pocket communication terminal 103, or the function to become possible to transmit the image information of the pictures 215 which are the bodies taken a photograph to another pocket communication terminal (103) etc. by the program for edit / transfer downloaded from a server 213 is given to it.

[0084]

Drawing 12 is a flow chart which shows processing actuation of each part in a photography restraint release system given in drawing 11 .

[0085]

In drawing 12 , if the current position of the user who carried the pocket communication terminal 103 is in an art gallery 211 (it is No at step S221), the short-distance Radio Communications Department 113 will also receive the program for edit / transfer from a server 213, while receiving the photography limit information from the photography limit information sending set 101 as shown by drawing 1 . Therefore, a control section 117 controls CCD camera 107 that the photography actuation by CCD camera 107 should be regulated based on the above-mentioned photography limit information (step S222). If what the specific carbon button which is in this condition, for example, is in the control unit of the pocket communication terminal 103 was operated for (user) is recognized, a control section 117 will carry out wireless transmission of the demand of photography authorization to a server 213 through the short-distance radio terminal 113 (step S223).

[0086]

Next, the notice of the photography authorization by which wireless transmission is carried out from a server 213 confirms whether it was received by the short-distance radio terminal 113 (step S224). If the short-distance radio terminal 113 judges that the notice of photography

authorization was received as a result of this check (it is Yes at step S224), a control section 117 will confirm whether the accounting information to the photography authorization of pictures 215 grade by which wireless transmission is carried out from a server 213, and the procedure demand for tariff payment were received by the short-distance Radio Communications Department 113 (step S225). If it judges that the short-distance radio terminal 113 received the procedure demand for accounting information and tariff payment as a result of this check (it is Yes at step S225), a control section 117 will confirm whether the user ended the predetermined procedure for tariff payment. The processing which notifies information, such as a card number of the credit card which a user possesses, or the account number of a user's bank account, to a server 213 as an example of the predetermined procedure for tariff payment here using the pocket communication terminal 103 is mentioned (step S226).

[0087]

a part of photography limit by which wireless transmission of the control section 117 will be carried out from a server 213 if it judges that the above-mentioned predetermined procedure was completed as a result of this check (it is Yes at step S226) — it is confirmed whether the notice of discharge was received by the short-distance Radio Communications Department 113. Incidentally, this photography limit is the notice of the purport that the notice of discharge enabled photography of the fine-arts work of specific pictures 215 grade, a part (step S227). Photography actuation of the specific fine-arts work by CCD camera 107 if it judges that the notice of discharge was received in part (it is Yes at step S227) of the above-mentioned photography limit is started for the short-distance Radio Communications Department 113 as a result of this check (step S228).

[0088]

Next, in the pocket communication terminal 103, the above-mentioned program for edit / transfer is started, and the image information of the fine-arts work which carried out [ above-mentioned ] photography is edited into picture postcards (step S229). And after performing processing which performs processing which prints out the image information of the fine-arts work edited into picture postcards later, or (step S230) is transmitted to other pocket communication terminals 103 (step S231), a series of processing actuation is ended. In addition, if the current position of the user who carried the pocket communication terminal 103 is outside the photography restricted area in an art gallery 211, the short-distance Radio Communications Department 113 will not receive the photography limit information from the photography limit information sending set 101 as shown by drawing 1 (being step S221 Yes). Therefore, a control section 117 controls CCD camera 107 to be able to perform the usual photography without a photography limit of CCD camera 107 (step S232). In addition, although drawing 11 and the system shown in drawing 12 explained as using the pocket communication terminal 103 which built in CCD camera 107, the processing actuation same also as replacing with the pocket communication terminal 103 and using a digital camcorder as the above is possible.

[0089]

As mentioned above, although the suitable operation gestalt of this invention was explained, these are the instantiation for explanation of this invention, and are not the meanings which limit the range of this invention only to these operation gestalten. This invention can be carried out with other various gestalten. For example, the following applications can also be assumed if it sees about the photography restraint release system shown by drawing 11 .

[0090]

That is, the above-mentioned photography restraint release system can be applied when permitting exceptionally the photography in the interior of the facility which has received the photography limit of a prominent shrine, a Buddhist temple, etc. in tourist resorts, such as Nara, Kyoto, and Kamakura.

[0091]

In this case, it is possible also in reducing the price of an admission fee a little beforehand, publishing a coupon, whenever an admission fee cancels a photography limit partially, without reducing the price in order to make it charge to the user who asks for internal photography whenever it cancels a photography limit partially, or to increase a repeater, and providing service

which discounts the admission fee for next entrance according to the issue mark of a coupon. Moreover, in the above-mentioned facility, when a user adds and pays a tariff, it is also possible to offer service to which the text data concerning these facilities is transmitted to the pocket communication terminal 103 from the server of these facilities. In addition, if various commercial (image) information is passed from the server arranged in these facilities when a user photos the inside of the above-mentioned shrine or a Buddhist temple by the pocket communication terminal 103, the administration of these facilities can obtain an advertising rate income from the company which requests an advertisement.

[0092]

moreover, the background image of this spot that reported to the user the message which will teach the optimal spot for the photography in these facilities in amusement facilities, such as a prominent tourist resort and a famous amusement park, if a predetermined tariff is paid through the pocket communication terminal 103, and the user photoed using the pocket communication terminal 103 — a user — it is possible to apply the system shown by drawing 11 also to the service which offers the image which compounded his photograph of his face. In this case, if the image of the composite photograph of its own photograph of his face and a specific spot is transmitted to another user's pocket communication terminal 103, another user can be notified of a user's current position. Furthermore, if a user takes a photograph at a certain station using the pocket communication terminal 103, it is possible to apply the system shown by drawing 11 also to service to which attached information, such as Kursbuch in this station, is transmitted to the pocket communication terminal 103 for pay.

[0093]

In addition, about the processing about accounting mentioned above, the notice of a purport which performed photography from the pocket communication terminal 103 is transmitted to a dial office side through a mobile communication network, and may be made to carry out accounting by the dial office side.

[0094]

[Effect of the Invention]

It can make it possible to ensure the photography limit within a photography limit division in the personal digital assistant which has photography equipment or a photography means according to this invention, as explained above.

[0095]

moreover, the thing it enables it to ensure information to perimeters including the person taken a photograph when photoing the person made applicable to photography in the personal digital assistant which has photography equipment or a photography means according to this invention — the person taken a photograph — while he does not know, it can avoid \*\*\*\*(ing)

[Brief Description of the Drawings]

[Drawing 1] The block diagram showing the 1st operation gestalt of the photography limit system according to this invention.

[Drawing 2] The block diagram showing the 2nd operation gestalt of the photography limit system according to this invention.

[Drawing 3] The block diagram showing the 3rd operation gestalt of the photography limit system according to this invention.

[Drawing 4] The flow chart which shows processing actuation of each part in a photography limit system given in drawing 3.

[Drawing 5] The block diagram showing 1 operation gestalt of the photography warning system according to this invention.

[Drawing 6] The explanatory view showing an example applied to the location which should regulate unconditional photography [ in / for the photography limit system according to this invention / the outdoors ].

[Drawing 7] The explanatory view showing another example applied to the location which should regulate unconditional photography [ in / for the photography limit system according to this invention / the outdoors ].

[Drawing 8] The flow chart which shows processing actuation of each part in a photography limit

system given in drawing 7 .

[Drawing 9] The explanatory view showing an example of the commercial system to offer information using the pocket communication terminal according to this invention.

[Drawing 10] The flow chart which shows processing actuation of each part in a commercial system to offer information given in drawing 9 .

[Drawing 11] The explanatory view showing an example of the photography restraint release system using the pocket communication terminal according to this invention.

[Drawing 12] The flow chart which shows processing actuation of each part in a photography restraint release system given in drawing 11 .

[Description of Notations]

101 123 Photography limit information sending set

103 Pocket Communication Terminal

105 Body Taken Photograph

107 Digital Camera (CCD Camera)

109 Communications Department

111 127 Memory

113 Short-distance Radio Communications Department

115 Display

117 131 Control section

121 Photography Prohibition Area

121a The inlet port of photography prohibition area

129 Radio Transmitter

133 Photography Limit Make Changes Information Sending Set

153 Build in Digital Camera, Twist and it is Pocket Communication Terminal.

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[Translation done.]

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TECHNICAL FIELD

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[Field of the Invention]

This invention relates to amelioration of the technique for restricting effectively the photography actuation in the object and space field by the pocket communication terminal which built in photography means, such as photography equipments, such as a digital still camera (henceforth a "digital camera"), or a digital camcorder, and a digital camera, to which the photography limit was imposed.

[0002]

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[Translation done.]

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PRIOR ART

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[Description of the Prior Art]

Development of the digital technique in recent years has had great effect on the technological innovation concerning a digital camera and a digital camcorder. In the digital camera, the high-performance-izing and miniaturization are progressing and pocket communication terminals, such as a portable telephone which contained the digital camera in connection with it, or a PHS terminal, are developed. Since it is possible to transmit the static-image data photoed with the digital camera and dynamic-image data to other pocket communication terminals etc. through a mobile communication network, the above-mentioned pocket communication terminal can also be made to demonstrate the function as a TV phone machine in this pocket communication terminal now. On the other hand, the above-mentioned video data is reproducible to the display of a pocket communication terminal, or the display of a personal computer terminal on real time with a digital camcorder by transmitting the photoed video data to other pocket communication terminals, personal computer terminals, etc. through a mobile communication network.

[0003]

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[Translation done.]



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EFFECT OF THE INVENTION

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[Effect of the Invention]

It can make it possible to ensure the photography limit within a photography limit division in the personal digital assistant which has photography equipment or a photography means according to this invention, as explained above.

[0095]

moreover, the thing it enables it to ensure information to perimeters including the person taken a photograph when photoing the person made applicable to photography in the personal digital assistant which has photography equipment or a photography means according to this invention — the person taken a photograph — while he does not know, it can avoid \*\*\*(ing)

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[Translation done.]

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## TECHNICAL PROBLEM

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### [Problem(s) to be Solved by the Invention]

By the way, two or more facilities where photography of a movie theater, a theater, etc. on the Copyright Act is forbidden, and facilities where photography is forbidden from a viewpoint on defense of a bank etc. exist in a city with population accumulation of the magnitude beyond a fixed scale. Moreover, a management subject takes into consideration the bad influence to a player's play, the stress which an animal receives like facilities, such as various kinds of sport facilities and a zoo, and if possible, the facility it is considered that wants to forbid use of the flash plate at the time of photography also exists. Furthermore, it is predicted as that to which the management subject who thinks that he wants to charge a user on the occasion of the photography within the photography limit division in each [ these ] facility naturally also exists among management subjects of a facility like an art gallery or a museum.

[0004]

However, since the pocket communication terminal of the above-mentioned configuration is easy drag-in even if it is the small photography prohibition part which was sake [ the part ] for example, mentioned above, the object of the ban on photography steals and photographs (\*\*\*\*), and may be done by the user. Moreover, since proof of having \*\*\*\*(ed) when eliminating this image data from the above-mentioned digital camera does not remain after transmitting immediately the image data of the object of the ban on the photography which the user photoed to another pocket communication terminal which exists in other locations, it is difficult to prove that the user performed \*\*\*\* in the photography prohibition part by the management subject side.

[0005]

In addition, constituting from a pocket communication terminal of the above-mentioned configuration so that a false shutter sound may be emitted from a pocket communication terminal at the time of photography as a means to prevent \*\*\*\*(ing) while the person itself [ this ] does not know in order to protect a person's (person taken a photograph) portrait rights made applicable to photography has reported to the perimeter that photography is performed. However, since the sound emitted from the above-mentioned pocket communication terminal at the time of photography cannot be set up not much greatly if the trouble to a perimeter is taken into consideration, it cannot be said that the (information to the person made applicable to photography) effectiveness is enough. Furthermore, although he is trying for a digital camcorder to report photoing near the camera lens section for light emitting diode (LED) etc. to the person taken a photograph by making light use and emit, for example at the time of photography, it is not taken into consideration about the \*\*\*\* prevention effectiveness.

[0006]

In a conventional pocket (digital camera was built in) communication terminal and the conventional conventional digital camcorder, it was difficult to ensure a photography limit of the ban on photography, the disable of a flash plate, etc., therefore it infringed on copyright or portrait rights, and had the trouble of the secrecy on defense being revealed so that clearly from the contents described above. moreover, the case where the person made applicable to photography with a digital camera, a digital camcorder, etc. is photoed — the information to

perimeters including the person taken a photograph — inadequate — the person taken a photograph — while he did not know, it may have \*\*\*\*(ed).

[0007]

Therefore, the purpose of this invention is in the personal digital assistant which has photography equipment or a photography means to enable it to ensure the photography limit within a photography limit division.

[0008]

moreover, the thing it enables it to ensure information to perimeters including the person taken a photograph when another purpose of this invention photos the person made applicable to photography in the personal digital assistant which has photography equipment or a photography means — the person taken a photograph — while he does not know, it is in being made not to \*\*\*\*.

[0009]

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[Translation done.]

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MEANS

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[Means for Solving the Problem]

It answers to the above-mentioned control signal, and the photography equipment according to the 1st viewpoint of this invention has the photography control means control photography actuation of the above-mentioned photography means, or the actuation relevant to photography, when the signal outputted from the photography means controlled electrically, a signal receiving means receive the equipment which the exterior left to a signal, and the above-mentioned signal receiving means is a control signal about control of photography by the above-mentioned photography means.

[0010]

With the suitable operation gestalt concerning the 1st viewpoint of this invention, the above-mentioned photography control means answers the above-mentioned control signal, and performs either of the accounting to the limit to the preservation or the external output to the memory in the ban on photography, a photography number-of-sheets limit, the flash plate disable at the time of photography, and the photography equipment of the photoed image data, and photography.

[0011]

With another operation gestalt, the received control signal is answered and it has further a control information display means to display the information relevant to the control which the above-mentioned photography control means performs.

[0012]

With the operation gestalt different from the above, it has the camera part where it is required for the case of equipment to expose to the exterior at the time of photography, and the antenna part in which the above-mentioned control signal is accepted from the outside, and if the antenna part is covered with a signal shielding material, contiguity arrangement is carried out so that the above-mentioned camera part may also be covered with coincidence.

[0013]

Moreover, with an operation gestalt different from the above, the above-mentioned photography control means continues the above-mentioned control, and cancels the control after that after receiving a control signal until predetermined time passes.

[0014]

The photography limit system according to the 2nd viewpoint of this invention It has photography equipment and the photography control signal sending set which transmits a photography control signal to the above-mentioned photography equipment. The above-mentioned photography equipment The photography means controlled electrically and a signal receiving means to receive a signal from the equipment which the exterior left, When the signal outputted from the above-mentioned signal receiving means is a photography control signal about control of photography by the above-mentioned photography means transmitted from the above-mentioned photography control signal sending set, The above-mentioned photography control signal is answered and it has the photography control means which controls photography actuation of the above-mentioned photography means, or the actuation relevant to photography.

[0015]

With the suitable operation gestalt concerning the 2nd viewpoint of this invention, the above-mentioned photography control signal sending set is arranged at near for [ on which the photography limit was imposed / taken a photograph ], or the inlet port of a space field [ exclusive ] on which the photography limit was imposed as a whole.

[0016]

another operation gestalt — the above — when the photography equipment on which the photography limit was imposed by the above-mentioned photography means with the photography control signal transmitted to the outlet of a space field [ exclusive ] from the above-mentioned photography control signal sending set passes through the above-mentioned outlet, it has the photography limit discharge signal sending set which transmits in a photography limit discharge signal so that the above-mentioned photography limit may be canceled.

[0017]

as another operation gestalt as the above — the above — it has further the photography limit modification signal sending set which transmits the modification signal for changing the photography limit imposed on the above-mentioned photography means by the photography control signal transmitted to each for [ which are arranged in the space field / exclusive / two or more / taken a photograph ] from the above-mentioned photography control signal sending set to the above-mentioned photography equipment.

[0018]

The photography warning system according to the 3rd viewpoint of this invention It has photography equipment and the personal digital assistant which does not have a photography means. The above-mentioned photography equipment A decision means for [ by which the photography limit was imposed on the photography actuation by the photography means controlled electrically and the above-mentioned photography means / taken a photograph ] to judge whether it is a thing in the space field on which the photography limit was imposed, When it judges that the above-mentioned decision means is a thing in the space field for [ on which the photography limit was imposed / taken a photograph ] on which the photography limit was imposed, A warning information transmitting means to turn predetermined warning information outside and to transmit, and when the above-mentioned warning information is received from the exterior, Based on the warning information, it has an information means by which a predetermined mode reports the purport made into the object taken a photograph, to the user of photography equipment. The above-mentioned personal digital assistant When the above-mentioned warning information is received from the above-mentioned photography equipment, based on the warning information, it has an information means by which a predetermined mode reports the purport made into the object taken a photograph, to the user of a personal digital assistant.

[0019]

The photography restraint release system according to the 4th viewpoint of this invention It has the server which delivers and receives information between photography equipment and the above-mentioned photography equipment which exists in the space field on which the photography limit was imposed. The above-mentioned photography equipment A decision means by which the space field for [ which the above-mentioned photography means tends to photo / taken a photograph ] judges whether the photography limit is imposed based on the photography means controlled electrically and the information given from the outside, When it judges that the photography limit is imposed on the above-mentioned decision means and conditions required to photography limit discharge are shown from a discharge demand transmitting means to transmit the discharge demand of a photography limit to the above-mentioned server, and the above-mentioned server, An activation means to perform processing for fulfilling the condition, and when the notice of photography limit discharge is given from the above-mentioned server, It has a photography limit discharge means to cancel the limit imposed on photography actuation of the above-mentioned photography means. The above-mentioned server When the notice of a purport which fulfilled the conditions for a presentation means to receive the photography limit discharge demand from the above-mentioned photography equipment, and to show the conditions for photography limit discharge, and the above-mentioned photography limit discharge

from the above-mentioned photography equipment is, When a verification means to verify whether the condition was fulfilled, and the above-mentioned verification means verify that the above-mentioned conditions are fulfilled, it has a notice means of photography limit discharge to notify the notice of a purport which cancels the above-mentioned photography limit to the above-mentioned photography equipment.

[0020]

[Embodiment of the Invention]

Hereafter, a drawing explains the gestalt of operation of this invention to a detail.

[0021]

Drawing 1 is the block diagram showing the 1st operation gestalt of the photography limit system according to this invention.

[0022]

The above-mentioned photography limit system is built in the facility where photography of a movie theater, a theater, etc. on the Copyright Act is forbidden, the facility where photography is forbidden from a viewpoint on defense like a bank, and as shown in drawing 1, it is equipped with the photography limit information sending set 101 and the pocket communication terminal 103. The photography limit information sending set 101 is arranged near the body 105 taken a photograph, and carries out wireless transmission of the photography limit information about the bodies 105 taken a photograph, such as a limit of photography good / non-information, and photography number of sheets, and flash plate use good / no. If it puts in another way, the photography limit of photography "no", photography number of sheets "a limit", flash plate use "no", etc. will be beforehand imposed on the body 105 taken a photograph. In addition, although the photography limit information sending set 101 is not indicated to drawing 1, it shall contain the memory which stores the above-mentioned photography limit information beforehand, the radio transmitter for carrying out wireless transmission of the above-mentioned photography limit information stored in this memory, and the control section for controlling these. On the other hand, it the pocket communication terminal 103 which receives photography limit information etc. is not only equipped with the communications department 109, memory 111, the short-distance Radio Communications Department 113, a display 115, and a control section 117, but builds in a digital camera 107, i.e., a CCD camera, further.

[0023]

In the pocket communication terminal 103, CCD camera 107 photos the body 105 taken a photograph under control of a control section 117. Information is delivered [ the communications department 109 ] and received through a mobile communication network under control of a control section 117 between other pocket communication terminals (not shown), an information processing terminal (personal computer terminal) (not shown), etc. Memory 111 memorizes the image data which contains the body 105 which CCD camera 107 photoed taken a photograph under control of a control section 117, the data of everything that received from other pocket communication terminals (not shown) etc. through the mobile communication network by the communications department 109, etc.

[0024]

The short-distance Radio Communications Department 113 transmits the data of everything that was read from memory 111 by the control section 117 under control of a control section 117 by direct non-contact to other pocket communication terminals which exist at a short distance from the pocket communication terminal 103, without minding the above-mentioned mobile communication network (not shown). Moreover, under control of a control section 117, the short-distance Radio Communications Department 113 receives the photography limit information about the above-mentioned body 105 by which wireless transmission is carried out from the photography limit information sending set 101 taken a photograph, and outputs this photography limit information to memory 111 through a control section 117. With this operation gestalt, Blue tooth (Bluetooth) (trademark of Blue tooth SIG, Inc, and USA) is used for the short-distance Radio Communications Department 113.

[0025]

A display 115 displays the image data which contains the body 105 which CCD camera 107

photoed taken a photograph under control of a control section 117, the data of everything that the communications department 109 received from other pocket communication terminals etc. through the mobile communication network (not shown), etc. in a predetermined display mode. A control section 117 controls CCD camera 107, the communications department 109, memory 111, the short-distance Radio Communications Department 113, and a display 115.

[0026]

Next, in the photography limit system of the above-mentioned configuration, the processing flow in the case of photoing the body 105 (the photography limit of photography "no", photography number of sheets "a limit", flash plate use "no", etc. being beforehand imposed, as mentioned above) taken a photograph using the pocket communication terminal 103 (CCD camera 107) is explained.

[0027]

In drawing 1, the photography limit information sending set 101 is carrying out wireless transmission of the photography limit information (namely, information on the photography "no" about the body 105 taken a photograph, photography number of sheets "a limit", or flash plate use "no") about the body 105 taken a photograph which was mentioned above continuously or intermittently. On the other hand, in the pocket communication terminal 103 side, if it is made an ON state also about the short-distance Radio Communications Department 113 in case a user makes CCD camera 107 an ON state and sets the mode of this pocket communication terminal 103 as photography mode, thereby, the short-distance Radio Communications Department 113 will be in the standby condition that the photography limit information by which wireless transmission is carried out and which was mentioned above is receivable from the photography limit information sending set 101.

[0028]

In this standby condition, if the short-distance Radio Communications Department 113 receives photography limit information other than the above-mentioned photography "no", a control section 117 will photo the body 105 taken a photograph with a photography limit by controlling CCD camera 107 based on this photography limit information. In addition, in the above-mentioned standby condition, when the short-distance Radio Communications Department 113 does not receive the above-mentioned photography limit information, the usual photography without a photography limit by the pocket communication terminal 103 (CCD camera 107) is performed under control of a control section 117. Photography limits other than photography "no" are explained according to an individual below, respectively.

[0029]

When the body 105 taken a photograph is the ban on photography when the control section 117 has recognized that the photography limit information mentioned above is photography "no" that is, a control section 117 outputs the command for forbidding photography actuation to CCD camera 107. Or the technique of forbidding the writing by the control section 117 to the memory 111 of the image data containing the body 105 which CCD camera 107 photoed taken a photograph may also be assumed, without forbidding photography actuation of CCD camera 107.

[0030]

Next, when the control section 117 has recognized that the photography limit information mentioned above is the photography number of sheets "a limit" about the body 105 taken a photograph, a control section 117 adds the number of sheets of the image data which CCD camera 107 photoed. And if it recognizes that the aggregate value reached the photography limit number of sheets of the body 105 set up beforehand taken a photograph, a control section 117 will control CCD camera 107 that the photography actuation by CCD camera 107 should be forbidden.

[0031]

Next, when a control section 117 has recognized that the command of the purport which should display the contents of a photography limit concerning the body 105 taken a photograph into the photography limit information which mentioned above in addition to the above-mentioned photography number-of-sheets "limit" information, flash plate use "no" information, etc. is included, a control section 117 displays the information control a display 115 and start to the

above-mentioned contents of a photography limit to a display 115 based on the above-mentioned command. Moreover, when the control section 117 has recognized that the command of the purport as which the photography limit information mentioned above should display the ban on photography of the body 105 taken a photograph in addition to photography "no" information, i.e., the information on a purport that the body 105 taken a photograph is the ban on photography, is included, a control section 117 displays the information control a display 115 and start to the ban on the above-mentioned photography to a display 115 based on the above-mentioned command.

[0032]

In this case, as mentioned above, it is performed any of prohibition of the write-in actuation to the memory 111 by control-section 117 self of the image data which whether photography actuation of CCD camera 107 being forbidden by the control section 117 and CCD camera 107 photoed they are. However, it may be made to carry out only the processing actuation displayed to a display 111 in the purport whose body 105 taken a photograph is the ban on photography as processing actuation for warning of the purport whose body 105 taken a photograph is the ban on photography to a user, without a control section 117 performing prohibition of these photography actuation, or prohibition of photography related actuation.

[0033]

In addition, if it is set as the level which this user's pocket communication terminal 103 cannot receive unless the range within several m radius is approached from the body 105 which the user mentioned above taken a photograph, malfunction of the pocket communication terminal 103 in the case of photoing things other than taken a photograph body 105 near the body 105 taken a photograph can be reduced for the transmission level of the photography limit information by which wireless transmission is carried out from the photography limit information sending set 101. Moreover, when using the photography limit information sending set 101 which set the wireless transmission level of photography limit information as a facility like a movie theater where the photography limit (ban on photography) is imposed by the whole in the hall one low as mentioned above, it can cope with by installing two or more photography limit information sending sets 101 to two or more proper parts in the hall, respectively so that the above-mentioned pocket communication terminal 103 may receive the above-mentioned photography limit information also in which a location in the hall.

[0034]

In addition, in the pocket communication terminal 103, it is possible to cope with it by considering the pocket communication terminal 103 as the following configurations about the injustice which prevents from performing a photography limit as the short-distance Radio Communications Department 113 cannot receive photography limit information from the photography limit information sending set 101 by covering parts other than CCD camera 107 with the ingredient which covers an electric wave. That is, if CCD camera 107 which is the camera part where it is required at the time of photography to expose to the exterior from the case of the pocket communication terminal 103, and the antenna part of the short-distance Radio Communications Department 113 which receives photography limit information from the photography limit information sending set 101 cover this antenna part with an electric-wave shielding material, it will be the configuration that contiguity arrangement of CCD camera 107 with which CCD camera 107 is also covered with coincidence, and the antenna part is carried out in the case of the pocket communication terminal 103. If even CCD camera 107 does not cover CCD camera 107 and the antenna part of the short-distance Radio Communications Department 113 with the above-mentioned electric-wave shielding material by carrying out contiguity arrangement in the case of the pocket communication terminal 103, it becomes impossible as mentioned above, to cover the electric wave of the photography limit information which is going to carry out incidence to the short-distance Radio Communications Department 113. Moreover, even if it is the case where wireless LAN is used, as the short-distance Radio Communications Department 113, the same effectiveness as the above is acquired, and even if it is the data communication by infrared radiation like [ other than an electric wave (for example, I r D A) (brief sketch of Infrared Data Association) ], the same effectiveness as the above is



acquired.

[0035]

As explained above, according to the 1st operation gestalt of the photography limit system according to this invention The photography limit information by which wireless transmission is carried out from the photography limit information sending set 101 is received in the short-distance Radio Communications Department 113 which prepared for the pocket communication terminal 103. By considering as the configuration outputted to the control section 117 for controlling each part of the pocket communication terminal 103 A photography limit of a movie theater, a theater, the ban on the photography within [, such as a bank, ] a photography limit division, the disable of a flash plate, etc. can make it possible to carry out easily and certainly in the pocket communication terminal 103 which has a photography function. Therefore, it can infringe on individual portrait rights, copyright, etc., or troubles, like the secrecy on the defense in facilities, such as a bank, leaks can be improved. Furthermore, it is also possible to charge easily to photography of various kinds of works of art in facilities, such as an art gallery. In addition, with this operation gestalt, although the photography limit information sending set 101 was explained as what is arranged near the body 105 taken a photograph, the official in charge of a facility etc. may be carrying it. Moreover, this operation gestalt is applicable not only to the pocket communication terminal 103 which built in CCD camera 107 but a digital camcorder.

[0036]

Drawing 2 is the block diagram showing the 2nd operation gestalt of the photography limit system according to this invention.

[0037]

the above-mentioned photography limit system — for example, the pocket communication terminal 103 which the area of all abbreviation in a facility like a movie theater or a theater is built in the facility set as photography limit (prohibition) area, and was shown in drawing 1 and the body 105 taken a photograph — in addition, it has the photography limit information sending set 123 and the reset-signal transmitter 125.

[0038]

As the function of the photography limit information sending set 101 of a publication and abbreviation identitas is achieved to drawing 1 and it is shown to drawing 2 , the photography limit information sending set 123 is arranged near inlet-port 121a of the photography prohibition area 121, or this inlet-port 121a, and carries out wireless transmission to the pocket communication terminal 103 in the photography prohibition area 121 continuously or intermittently in the above-mentioned photography limit information. The photography limit information sending set 123 contains the control section 131 for controlling the memory 127 which stores the above-mentioned photography limit information beforehand, the radio transmitter 129 for carrying out wireless transmission of the above-mentioned photography limit information stored in this memory 127, and memory 127 and a radio transmitter 129.

[0039]

On the other hand, the reset-signal transmitter 125 is arranged near outlet 121b of the photography prohibition area 121, or this outlet 121b, and carries out wireless transmission of the reset signal at this pocket communication terminal 103 that the photography limit imposed on the above-mentioned pocket communication terminal 103 in the photography prohibition area 121 using the photography limit information from the photography limit information sending set 121 should be reset.

[0040]

Next, in the photography limit system of the above-mentioned configuration, when the user who carried the above-mentioned pocket communication terminal 103 enters the above-mentioned photography prohibition area 121, the processing actuation which each part of a system performs is explained.

[0041]

In drawing 2 , if the user who carried the above-mentioned pocket communication terminal 103 is going to come in in the photography limited area 121 from inlet-port 121a, it will be received by the short-distance Radio Communications Department 113 of the pocket communication

terminal 103, and the above-mentioned (the body 105 taken a photograph is started) photography limit information from the radio transmitter 129 of the photography limit information sending set 123 will download in the memory 111 of the pocket communication terminal 103. Even if a user is going to photo the body 105 taken a photograph and makes CCD camera 107 an ON state by this since a control section 117 will control photography actuation of CCD camera 107 based on the above-mentioned photography limit information in memory 111 when a user takes a photograph using the above-mentioned pocket communication terminal 103 within the photography limited area 121, effective photography actuation of CCD camera 107 is regulated by the control section 117.

[0042]

Next, if the above-mentioned user is going to participate from the photography limited area 121 to the exterior through outlet 121b, it will be received by the short-distance Radio Communications Department 113 of the pocket communication terminal 103, and the above-mentioned reset signal from the reset-signal transmitter 125 will be transmitted to a control section 117 from the short-distance Radio Communications Department 113. By reading the above-mentioned reset signal, a control section 117 resets the above-mentioned photography limit information stored in memory 111.

[0043]

By the way, in the above-mentioned photography limit system, if the reset signal from the reset-signal transmitter 125 is not received by the short-distance Radio Communications Department 113 of the pocket communication terminal 103 even when the user who carried the pocket communication terminal 103 passes outlet 121b and participates from the photography limited area 121 to the exterior, the above-mentioned photography limit imposed on the pocket communication terminal 103 is not reset. Therefore, when the above-mentioned user participates out of the photography limited area 121, the pocket communication terminal 103 received the reset signal from the reset-signal transmitter 125, and not gone out, the fault that the condition that the photography limit was imposed on the pocket communication terminal 103 out of the photography limited area 121 continues will arise.

[0044]

It is made to carry out wireless transmission also of the initiation command of operation. then, the photography limit information sending set 123 to photography limit information — a time check — the pocket communication terminal 103 which passed inlet-port 121a with the user — this time check — the time of receiving an initiation command of operation with the above-mentioned photography limit information — a control section 117 — a time check — actuation being started, and, when the measured time amount value reaches the time amount value set up beforehand Also when resetting the photography limit imposed on the pocket communication terminal 103 and the pocket communication terminal 103 is not able to receive the reset signal from the reset-signal transmitter 125, generating of the above faults can be prevented.

[0045]

As explained above, according to the 2nd operation gestalt of the photography limit system according to this invention For example, it sets to inlet-port 121a of the facility where the area of all abbreviation in a facility like a movie theater or a theater is set as the photography limit (prohibition) area 121. In order that photography limit information may download photography limit information from the photography limit information sending set 123 uniformly to all the pocket communication terminals 103 that pass inlet-port 121a, Since it is not necessary to form a photography limit information sending set (123) for every body taken [ by which the same effectiveness as abbreviation is acquired also in the 1st operation gestalt mentioned above, and also the photography limit is carried out ] a photograph, the structure of a system can be simplified and a cost fall can also be aimed at.

[0046]

Furthermore, since photography of the body 105 taken a photograph can be permitted to this user and it can restrict also about the photography number of sheets of the body 105 taken a photograph when the photography tariff to the body 105 taken a photograph is paid to a facility management person in case a user is going to enter the photography limited area 121, it can also

charge to photography of the body 105 with which the photography limit was imposed taken a photograph. In addition, without restricting only to the time when a user passes inlet-port 121a, even if it performs download of the photography limit information from the photography limit information sending set 123 here and there in the photography limit (prohibition) area 121, it does not interfere. In addition, this operation gestalt is applicable not only to the pocket communication terminal 103 which built in CCD camera 107 but a digital camcorder.

[0047]

Drawing 3 is the block diagram showing the 3rd operation gestalt of the photography limit system according to this invention.

[0048]

In the above-mentioned photography limit system, as shown in drawing 3, in the point (only one piece has indicated both the body 105 taken a photograph and the photography limit Make Changes information sending set 133 at a time on account of illustration) of having installed the photography limit Make Changes information sending set 133 every body 105 taken [ on which the photography limit in the photography limited area 121 was imposed ] a photograph, it is [ drawing 2 ] different with the system of a publication. About other configurations, it is the same also in a system given in drawing 2. Each photography limit Make Changes information sending set 133 transmits the photography limit Make Changes information for adding modification to the contents of the photography limit information uniformly downloaded from the photography limit information sending set 123 to the pocket communication terminal 103 of the user who passes inlet-port 121a. Notice information for the body [ / other than photography limit Make Changes information ] (105) taken a photograph to notify the purport by which the photography limit is carried out to the pocket communication terminal 103 also carries out wireless transmission of each photography limit Make Changes information sending set 133.

[0049]

If it puts in another way, in case a user will photo the body (105) with which the photography limit is imposed using the pocket communication terminal 103 taken a photograph in the above-mentioned system By receiving the photography limit Make Changes information from a photography limit Make Changes information sending set (133) that the pocket communication terminal 103 corresponds, and adding this modification information to photography limit information from the photography limit information sending set 123 It enables it to change the contents of a photography limit into every body (105) taken a photograph.

[0050]

Next, the flow chart of drawing 4 explains processing actuation of each part in the photography limit system of the above-mentioned configuration.

[0051]

In drawing 4, if the user who carried the pocket communication terminal 103 is going to come in in the photography limited area 121 from inlet-port 121a, it will be received by the short-distance Radio Communications Department 113 of the pocket communication terminal 103, and the above-mentioned photography limit information from the radio transmitter 129 of the photography limit information sending set 123 will download in the memory 111 of the pocket communication terminal 103 (step S141). By next, the thing for which the body (105) which a user wants to photo in the photography limited area 121 taken a photograph was found out For example, if the notice of a purport by which the carbon button for CCD camera starting (not shown) in the control unit (not shown) of the pocket communication terminal 103 was operated can be received from the above-mentioned control unit (it is Yes at step S142) A control section 117 controls CCD camera 107 to an ON state, and sets the pocket communication terminal 103 as photography mode (step S143).

[0052]

Next, a control section 117 also controls the short-distance Radio Communications Department 113 to an ON state, and changes it into the standby condition that the photography limit Make Changes information from the photography limit Make Changes information sending set (133) corresponding to the body (105) which is a candidate for photography taken a photograph is receivable (step S144). In this standby condition, the pocket communication terminal 103

performs photography of the body (105) taken a photograph under the conditions which added the contents of the above-mentioned photography limit Make Changes information to the photography limit information downloaded from the photography limit information sending set 123 at Yes) and step S141 by the (step S145 when the short-distance Radio Communications Department 113 received photography limit Make Changes information (step S146).

[0053]

On the other hand, in the above-mentioned standby condition, when the short-distance Radio Communications Department 113 does not receive photography limit Make Changes information, based on the photography limit information downloaded from the photography limit information sending set 123, the pocket communication terminal 103 performs photography of the body (105) taken a photograph by No) and step S141 at the (step S145 (step S147). In addition, the processing actuation from step S142 to step S146 or step S147 is continued until a certain actuation which a user — for example, the above-mentioned carbon button for CCD camera starting (not shown) is turned OFF by the user — can presume to be those with an intention which participate outside from the photography limited area 121 is made (being step S148 No).

[0054]

Next, if the above-mentioned user checks the intention which is going to participate from the photography limited area 121 to the exterior through outlet 121b (it is Yes at step S148), it will be received by the short-distance Radio Communications Department 113 (step S149), and the above-mentioned reset signal from the reset-signal transmitter 125 will be outputted to a control section 117 from the short-distance Radio Communications Department 113. By reading the above-mentioned reset signal, a control section 117 resets the above-mentioned photography limit information stored in memory 111 (step S150).

[0055]

As explained above, according to the 3rd operation gestalt of the photography limit system according to this invention The same effectiveness is acquired also in the 2nd operation gestalt, and also the photography limit Make Changes information sending set 133 is installed in each body (105) of every taken a photograph. In case a user is going to photo each body (105) taken a photograph using the pocket communication terminal 103 Since the photography limit Make Changes information from the photography limit Make Changes information sending set (133) corresponding to this body (105) taken a photograph is received, it is possible to change the contents of a photography limit into each body (105) of every taken a photograph into the photography limited area 121. In addition, this operation gestalt is applicable not only to the pocket communication terminal 103 which built in CCD camera 107 but a digital camcorder.

[0056]

Drawing 5 is the block diagram showing 1 operation gestalt of the photography warning system according to this invention.

[0057]

The above-mentioned photography warning system consists of a pocket communication terminal 103 which built in the digital camera, i.e., a CCD camera, and a pocket communication terminal 153 which does not build in the digital camera (CCD camera), as shown in drawing 5 . Except for the point that only the pocket communication terminal 103 builds in CCD camera 107, both internal configurations of the pocket communication terminal 103 and the pocket communication terminal 153 are the same. That is, both the pocket communication terminals 103 and 153 build in the communications department 109 which achieves a function which was explained by drawing 1 thru/or drawing 3 , respectively, memory 111, the short-distance Radio Communications Department 113, the display 115, and the control section 117.

[0058]

In addition, as mentioned above, Blue tooth (Bluetooth) (trademark of Blue tooth SIG, Inc, and USA) is used, and if the short-distance Radio Communications Department 113 makes an ON state continue, it will continue transmitting continuously the information on a purport (photography actuation initiation information) that the pocket communication terminal 103 should start photography actuation after this on the outskirts in the short-distance Radio Communications Department 113. On the other hand, when the ON state of the short-distance

Radio Communications Department 113 is made intermittent, the above-mentioned photography actuation initiation information will be intermittently transmitted on the outskirts.

[0059]

Next, in the photography warning system of the above-mentioned configuration, when the user who carried the above-mentioned pocket communication terminal 103 is going to take a photograph and photography limit (prohibition) area is entered, the processing actuation which each part of a system performs is explained.

[0060]

In drawing 5, if it is made an ON state also about the short-distance Radio Communications Department 113 in case the user who carries the pocket communication terminal 103 makes CCD camera 107 an ON state and sets the mode of this pocket communication terminal 103 as photography mode, thereby, the short-distance Radio Communications Department 113 will transmit photography actuation initiation information on the outskirts continuously or intermittently.

[0061]

On the other hand, the user who is carrying the pocket communication terminal 153 receives continuously or intermittently the photography actuation initiation information by which makes an ON state the short-distance Radio Communications Department 113 continuously or intermittently, and wireless transmission is carried out continuously or intermittently from the short-distance Radio Communications Department 113 by the side of the above-mentioned pocket communication terminal 103, and this photography actuation initiation information is outputted to a control section 117. A control section 117 will control the loudspeaker (not shown) built in the pocket communication terminal 153, if this photography actuation initiation information is read. Emit a predetermined beep sound from this loudspeaker (not shown), or A display 115 is controlled. Display a predetermined warning message on a display 115, or It is made to recognize to the user who carries the pocket communication terminal 153 by starting the vibration device (not shown) with which the pocket communication terminal 153 is equipped etc. that photography tends to be performed in near.

[0062]

In addition, if the above-mentioned pocket communication terminal 103 is constituted on the occasion of photography actuation of the pocket communication terminal 103 so that a false shutter sound may also be emitted with wireless transmission of the above-mentioned photography actuation initiation information, the purport by which photography actuation will be started from now on can be made to recognize also to the user who is not carrying the pocket communication terminal 153. Moreover, it is also possible to constitute this digital instrument so that wireless transmission can perform warning information on a purport that photography actuation is performed continuously or intermittently during photography actuation, from this digital motion picture camera machine to the digital motion picture camera machine which can perform continuous photography actuation like a video camera.

[0063]

As explained above, according to 1 operation gestalt of the photography warning system according to this invention When it is going to take a photograph using CCD camera 107 of the pocket communication terminal 103 which the user is carrying, in order that the body (105) taken a photograph, other persons, etc. may prevent being stolen, photographed and carried out, While emitting a predetermined sound at the time of photography actuation etc., the above-mentioned photography actuation initiation information etc. by carrying out wireless transmission around the pocket communication terminal 103 through the short-distance Radio Communications Department 113 It is possible to make surrounding people etc. recognize more certainly warning of the purport by which photography actuation will be started from now on. Therefore, before the person made applicable to photography notices at all, fault which is photographed [ is stolen and ] and carried out can be prevented.

[0064]

Drawing 6 is the explanatory view showing an example applied to the location which should regulate unconditional photography [ in / for the photography limit system according to this

invention / the outdoors ].

[0065]

In the example shown in drawing 6 , it considers as the location which should regulate the unconditional photography in the outdoors, and the beach which is crowded with the young women (155, 157, 159, 161, 163) of large number of people's swimming suit figure like the Shonan seashore of midsummer is assumed. Moreover, in this system, the pocket communication terminal 173 of a configuration of also having the GPS antenna 169 which receives the electric wave from two or more GPS Satellites (165 167), and GPS receiver 171 which acquires positioning information from the received this electric wave in addition to the configuration of the pocket communication terminal 103 mentioned above is adopted.

[0066]

When it is shown that a user's current position where the positioning information from GPS receiver 171 is carrying the pocket communication terminal 173 is the Shonan seashore, a control section 117 forbids the write-in actuation to the memory 111 by control-section 117 self of the image data which forbade photography actuation of CCD camera 107, or CCD camera 107 photoed like previous statement. Since it can prevent that the young woman (155-163) of a swimming suit figure is photoed without any restriction by the third person without notice by this, the portrait rights of the young woman (155-163) of these swimming suit figure are protected.

[0067]

in addition, the above — a young woman (155-163) is able to prevent separately theft \*\*\*\* of the swimming suit figure of these young women by the pocket communication terminal 103 of the user who approached these young women to fixed distance by carrying the photography limit information sending set 101 as shown by drawing 1 etc., and carrying out wireless transmission of the photography limit information which was mentioned above continuously or intermittently from the photography limit information sending set 101 In addition, although the example shown in drawing 6 explained the photography actuation using the pocket communication terminal 103 which built in CCD camera 107, in the example shown in drawing 6 , the photography limit is possible like [ actuation / in the case of using a digital camcorder / photography ] the above.

[0068]

Drawing 7 is the explanatory view showing another example applied to the location which should regulate unconditional photography [ in / for the photography limit system according to this invention / the outdoors ].

[0069]

In the example shown in drawing 7 , it considers as the location which should regulate the unconditional photography in the outdoors, and the test course of the new model under management of an automaker is assumed. Moreover, in this system, to each new model (177) which runs a test course 175, the photography limit information sending set 101 as shown by drawing 1 was carried, and theft \*\*\*\* of each new model (177) by the pocket communication terminal 103 of the user who approached the test course 175 to fixed distance is regulated by carrying out wireless transmission of the photography limit information which was mentioned above continuously or intermittently from the photography limit information sending set 101. Furthermore, in order to provide this system with various information by radio to each pocket communication terminal (103) which is going to photo each above-mentioned new model (177), the server 179 is installed in the bottom of management of an automaker.

[0070]

Drawing 8 is a flow chart which shows processing actuation of each part in a photography limit system given in drawing 7 .

[0071]

In drawing 8 , if the pocket communication terminal 103 (short-distance Radio Communications Department 113) of the user who approached the test course 175 to fixed distance receives photography prohibition information as photography limit information from the photography limit information sending set 101 carried in the new model 177 (it is Yes at step S181), it will be confirmed whether CCD camera 107 performed photography actuation by actuation of a user

(step S182). If it judges that CCD camera 107 performed photography actuation as a result of this check (it is Yes at step S182), a control section 117 will stop the processing which writes the image information from CCD camera 107 in memory 111 (step S183).

[0072]

Next, it is confirmed whether an automaker's commercial image information own [ as for the control section 117 / this ] where the short-distance Radio Communications Department 113 displayed the price of a new model (177) in the title from the server (it is hereafter written as a "server") 179 of an automaker was received (step S184). if it checks that the short-distance Radio Communications Department 113 has received the above-mentioned commercial image information as a result of this check (it is Yes at step S184) — the above-mentioned commercial image information — a display 115 — displaying (step S185) — "1" is added to the number counter of reception set up in memory 111. Next, a control section 117 checks whether the number of reception of the commercial image information which the short-distance Radio Communications Department 113 received has reached the predetermined number set up beforehand by checking the counted value of the above-mentioned number counter of reception (step S186). If the number of reception of commercial image information has not reached a predetermined number as a result of this check (it is No at step S186), it returns to processing actuation of step S181.

[0073]

On the other hand, if the number of reception of commercial image information has reached the predetermined number as a result of the above-mentioned check (it is Yes at step S186), a control section 117 will reset the counted value of the above-mentioned number counter of reception while notifying the purport that the number of reception of commercial image information reached the predetermined number to a server 179 through the short-distance Radio Communications Department 113 (step S187). And when the notice of invitation at a new car trial ride meeting from a server 179 is, a control section 117 will receive this notice through the short-distance Radio Communications Department 113 (step S188). If the above-mentioned photography limit information is not received, a control section 117 controls CCD camera 107 by step S181 so that the pocket communication terminal 103 (CCD camera 107) can perform the usual photography without a photography limit (step S189).

[0074]

In addition, the commercial image information by which wireless transmission is carried out is not limited to the pocket communication terminal 103 from a server 179 at step S184 by an automaker's own thing mentioned above, and even if it is the commercial image information by the request from the company of another type of industry, it does not interfere. In this case, naturally this automaker can get an advertising rate income from the company which requested the advertisement. Although drawing 7 and the example shown in drawing 8 explained the photography actuation using the pocket communication terminal 103 which built in CCD camera 107, in drawing 7 and the example shown in drawing 8, the same processing actuation as the above is possible also about the photography actuation using a digital camcorder.

[0075]

Drawing 9 is the explanatory view showing an example of the commercial system to offer information using the pocket communication terminal according to this invention.

[0076]

It consists of systems shown in drawing 9 so that wireless transmission of the commercial information which requires for 0000 cameras 191 the user who carried the pocket communication terminal 103 from the server 193 currently installed in the inside of a shop of 0000 cameras 191 by using the pocket communication terminal 103 (CCD camera 107), and performing photography actuation while passing through in front of the store [ of 0000 cameras 191 which are mass retailers, such as home electronics, ] may be carried out as image information at the pocket communication terminal 103.

[0077]

Drawing 10 is a flow chart which shows processing actuation of each part in a commercial system to offer information given in drawing 9.

[0078]

In drawing 10, if the current position of the user who carried the pocket communication terminal 103 is outside a photography restricted area like previous statement, the short-distance Radio Communications Department 113 will not receive the photography limit information from the photography limit information sending set 101 as shown by drawing 1 (being step S201 Yes). Therefore, a control section 117 controls CCD camera 107 so that the pocket communication terminal 103 (CCD camera 107) can perform the usual photography without a photography limit. Next, a control section 117 confirms whether the user performed photography actuation near the 0000 above-mentioned camera 191 using CCD camera 107 (step S202). If it judges that photography actuation was performed as a result of this check (it is Yes at step S202), as for a control section 117, the short-distance Radio Communications Department 113 will confirm whether the commercial image information from the server 193 of the 0000 above-mentioned camera 191 was received (step S203).

[0079]

if it checks that the short-distance Radio Communications Department 113 has received the above-mentioned commercial image information as a result of this check (it is Yes at step S203) — the above-mentioned commercial image information — a display 115 — displaying (step S204) — "1" is added to the count counter of reception set up in memory 111. Next, a control section 117 confirms whether the count of reception of the commercial image information which the short-distance Radio Communications Department 113 received became the count of predetermined set up beforehand by checking the counted value of the above-mentioned count counter of reception (step S205). If the count of reception of commercial image information has not become the count of predetermined as a result of this check (it is No at step S205), it returns to processing actuation of step S201.

[0080]

On the other hand, if the count of reception of commercial image information has become the count of predetermined as a result of the above-mentioned check (it is Yes at step S205), a control section 117 will reset the counted value of the above-mentioned count counter of reception while the count of reception of commercial image information notifies the purport that the count of predetermined was become to a server 193 through the short-distance Radio Communications Department 113 (step S206). And if the short-distance Radio Communications Department 113 receives the notice of point addition for a user to receive offer of the premium (for example, premium) from 0000 cameras 191 from a server 193 (step S207), a control section 117 will add the notified point size to the point size counter set up in memory 111 (step S208).

[0081]

Next, if the short-distance Radio Communications Department 113 receives the notice of premium offer from a server 193, the counted value of the above-mentioned point size counter will be reset, and a series of processing actuation will be ended (step S209). If the above-mentioned photography limit information is received, CCD camera 107 will be controlled by step S201 so that a control section 117 cannot perform the usual photography in response to the photography limit based on the above-mentioned photography limit information in the pocket communication terminal 103 (CCD camera 107) (step S210). In addition, the commercial image information by which wireless transmission is carried out is not limited to the pocket communication terminal 103 by the thing of 0000 camera 191 self mentioned above from a server 193 at step S203, and even if it is the commercial image information by the request from another company, it does not interfere. In this case, naturally 0000 cameras 191 can obtain an advertising rate income from the above-mentioned company which requested the advertisement. Although drawing 9 and the system shown in drawing 10 explained as using the pocket communication terminal 103 which built in CCD camera 107, the processing actuation same also as replacing with the pocket communication terminal 103 and using a digital camcorder as the above is possible.

[0082]

Drawing 11 is the explanatory view showing an example of the photography restraint release system using the pocket communication terminal according to this invention.



[0083]

[ in the art gallery 211 which is a photography restricted area in the system shown in drawing 11 , for example ] The pocket communication terminal 103 which a user carries receives the notice of the photography authorization from the server 213 installed in an art gallery 211. And by notifying the purport which completed the predetermined procedure for this user to pay the photography tariff charged using the pocket communication terminal 103 to a server 213, it is constituted so that photography of the work of art of the pictures 215 grade which is a body taken a photograph may begin and it may become possible. Moreover, edit into picture postcards, and it prints out in the pocket communication terminal 103, or the function to become possible to transmit the image information of the pictures 215 which are the bodies taken a photograph to another pocket communication terminal (103) etc. by the program for edit / transfer downloaded from a server 213 is given to it.

[0084]

Drawing 12 is a flow chart which shows processing actuation of each part in a photography restraint release system given in drawing 11 .

[0085]

In drawing 12 , if the current position of the user who carried the pocket communication terminal 103 is in an art gallery 211 (it is No at step S221), the short-distance Radio Communications Department 113 will also receive the program for edit / transfer from a server 213, while receiving the photography limit information from the photography limit information sending set 101 as shown by drawing 1 . Therefore, a control section 117 controls CCD camera 107 that the photography actuation by CCD camera 107 should be regulated based on the above-mentioned photography limit information (step S222). If what the specific carbon button which is in this condition, for example, is in the control unit of the pocket communication terminal 103 was operated for (user) is recognized, a control section 117 will carry out wireless transmission of the demand of photography authorization to a server 213 through the short-distance radio terminal 113 (step S223).

[0086]

Next, the notice of the photography authorization by which wireless transmission is carried out from a server 213 confirms whether it was received by the short-distance radio terminal 113 (step S224). If the short-distance radio terminal 113 judges that the notice of photography authorization was received as a result of this check (it is Yes at step S224), a control section 117 will confirm whether the accounting information to the photography authorization of pictures 215 grade by which wireless transmission is carried out from a server 213, and the procedure demand for tariff payment were received by the short-distance Radio Communications Department 113 (step S225). If it judges that the short-distance radio terminal 113 received the procedure demand for accounting information and tariff payment as a result of this check (it is Yes at step S225), a control section 117 will confirm whether the user ended the predetermined procedure for tariff payment. The processing which notifies information, such as a card number of the credit card which a user possesses, or the account number of a user's bank account, to a server 213 as an example of the predetermined procedure for tariff payment here using the pocket communication terminal 103 is mentioned (step S226).

[0087]

a part of photography limit by which wireless transmission of the control section 117 will be carried out from a server 213 if it judges that the above-mentioned predetermined procedure was completed as a result of this check (it is Yes at step S226) — it is confirmed whether the notice of discharge was received by the short-distance Radio Communications Department 113. Incidentally, this photography limit is the notice of the purport that the notice of discharge enabled photography of the fine-arts work of specific pictures 215 grade, a part (step S227). Photography actuation of the specific fine-arts work by CCD camera 107 if it judges that the notice of discharge was received in part (it is Yes at step S227) of the above-mentioned photography limit is started for the short-distance Radio Communications Department 113 as a result of this check (step S228).

[0088]

Next, in the pocket communication terminal 103, the above-mentioned program for edit / transfer is started, and the image information of the fine-arts work which carried out [ above-mentioned ] photography is edited into picture postcards (step S229). And after performing processing which performs processing which prints out the image information of the fine-arts work edited into picture postcards later, or (step S230) is transmitted to other pocket communication terminals 103 (step S231), a series of processing actuation is ended. In addition, if the current position of the user who carried the pocket communication terminal 103 is outside the photography restricted area in an art gallery 211, the short-distance Radio Communications Department 113 will not receive the photography limit information from the photography limit information sending set 101 as shown by drawing 1 (being step S221 Yes). Therefore, a control section 117 controls CCD camera 107 to be able to perform the usual photography without a photography limit of CCD camera 107 (step S232). In addition, although drawing 11 and the system shown in drawing 12 explained as using the pocket communication terminal 103 which built in CCD camera 107, the processing actuation same also as replacing with the pocket communication terminal 103 and using a digital camcorder as the above is possible.

[0089]

As mentioned above, although the suitable operation gestalt of this invention was explained, these are the instantiation for explanation of this invention, and are not the meanings which limit the range of this invention only to these operation gestalten. This invention can be carried out with other various gestalten. For example, the following applications can also be assumed if it sees about the photography restraint release system shown by drawing 11 .

[0090]

That is, the above-mentioned photography restraint release system can be applied when permitting exceptionally the photography in the interior of the facility which has received the photography limit of a prominent shrine, a Buddhist temple, etc. in tourist resorts, such as Nara, Kyoto, and Kamakura.

[0091]

In this case, it is possible also in reducing the price of an admission fee a little beforehand, publishing a coupon, whenever an admission fee cancels a photography limit partially, without reducing the price in order to make it charge to the user who asks for internal photography whenever it cancels a photography limit partially, or to increase a repeater, and providing service which discounts the admission fee for next entrance according to the issue mark of a coupon. Moreover, in the above-mentioned facility, when a user adds and pays a tariff, it is also possible to offer service to which the text data concerning these facilities is transmitted to the pocket communication terminal 103 from the server of these facilities. In addition, if various commercial (image) information is passed from the server arranged in these facilities when a user photos the inside of the above-mentioned shrine or a Buddhist temple by the pocket communication terminal 103, the administration of these facilities can obtain an advertising rate income from the company which requests an advertisement.

[0092]

moreover, the background image of this spot that reported to the user the message which will teach the optimal spot for the photography in these facilities in amusement facilities, such as a prominent tourist resort and a famous amusement park, if a predetermined tariff is paid through the pocket communication terminal 103, and the user photoed using the pocket communication terminal 103 — a user — it is possible to apply the system shown by drawing 11 also to the service which offers the image which compounded his photograph of his face In this case, if the image of the composite photograph of its own photograph of his face and a specific spot is transmitted to another user's pocket communication terminal 103, another user can be notified of a user's current position. Furthermore, if a user takes a photograph at a certain station using the pocket communication terminal 103, it is possible to apply the system shown by drawing 11 also to service to which attached information, such as Kursbuch in this station, is transmitted to the pocket communication terminal 103 for pay.

[0093]

In addition, about the processing about accounting mentioned above, the notice of a purport

which performed photography from the pocket communication terminal 103 is transmitted to a dial office side through a mobile communication network, and may be made to carry out accounting by the dial office side.  
[0094]

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[Translation done.]

## \* NOTICES \*

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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

## DESCRIPTION OF DRAWINGS

## [Brief Description of the Drawings]

[Drawing 1] The block diagram showing the 1st operation gestalt of the photography limit system according to this invention.

[Drawing 2] The block diagram showing the 2nd operation gestalt of the photography limit system according to this invention.

[Drawing 3] The block diagram showing the 3rd operation gestalt of the photography limit system according to this invention.

[Drawing 4] The flow chart which shows processing actuation of each part in a photography limit system given in drawing 3 .

[Drawing 5] The block diagram showing 1 operation gestalt of the photography warning system according to this invention.

[Drawing 6] The explanatory view showing an example applied to the location which should regulate unconditional photography [ in / for the photography limit system according to this invention / the outdoors ].

[Drawing 7] The explanatory view showing another example applied to the location which should regulate unconditional photography [ in / for the photography limit system according to this invention / the outdoors ].

[Drawing 8] The flow chart which shows processing actuation of each part in a photography limit system given in drawing 7 .

[Drawing 9] The explanatory view showing an example of the commercial system to offer information using the pocket communication terminal according to this invention.

[Drawing 10] The flow chart which shows processing actuation of each part in a commercial system to offer information given in drawing 9 .

[Drawing 11] The explanatory view showing an example of the photography restraint release system using the pocket communication terminal according to this invention.

[Drawing 12] The flow chart which shows processing actuation of each part in a photography restraint release system given in drawing 11 .

## [Description of Notations]

101 123 Photography limit information sending set

103 Pocket Communication Terminal

105 Body Taken Photograph

107 Digital Camera (CCD Camera)

109 Communications Department

111 127 Memory

113 Short-distance Radio Communications Department

115 Display

117 131 Control section

121 Photography Prohibition Area

121a The inlet port of photography prohibition area

129 Radio Transmitter

133 Photography Limit Make Changes Information Sending Set

153 Build in Digital Camera, Twist and it is Pocket Communication Terminal.

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[Translation done.]

## \* NOTICES \*

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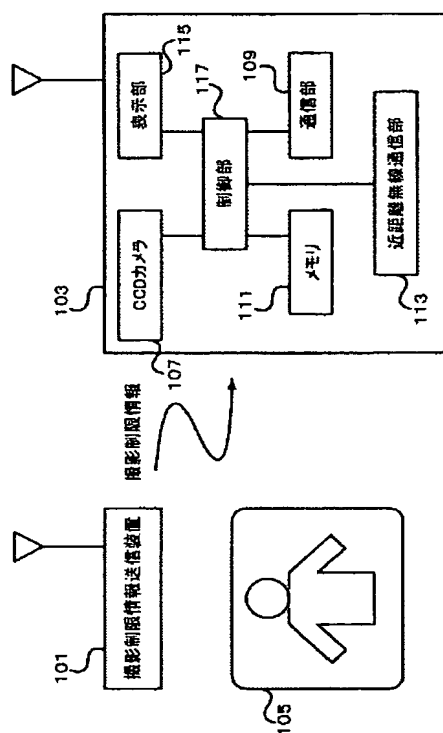
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2.\*\*\*\* shows the word which can not be translated.

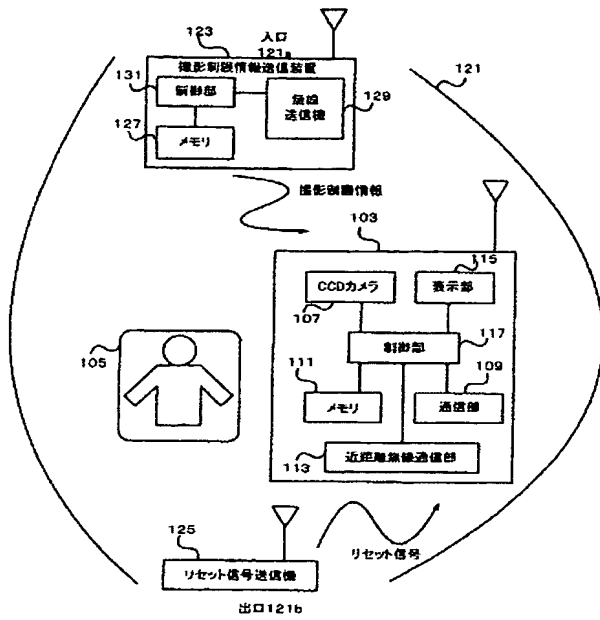
3.In the drawings, any words are not translated.

## DRAWINGS

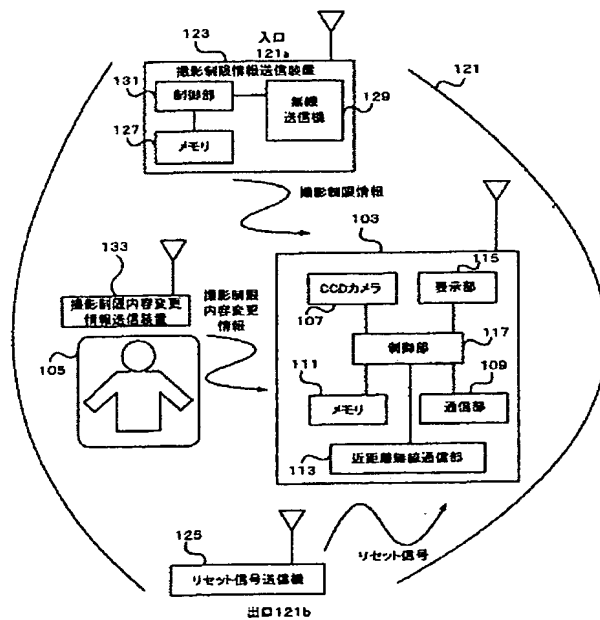
[Drawing 1]



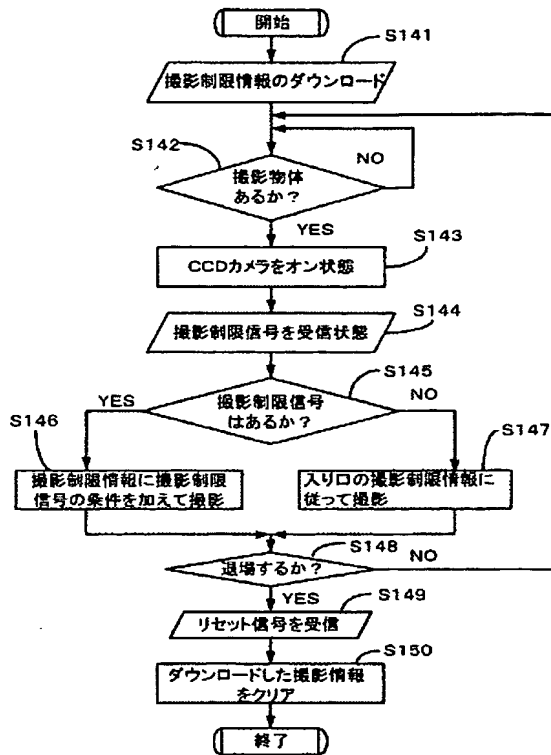
[Drawing 2]



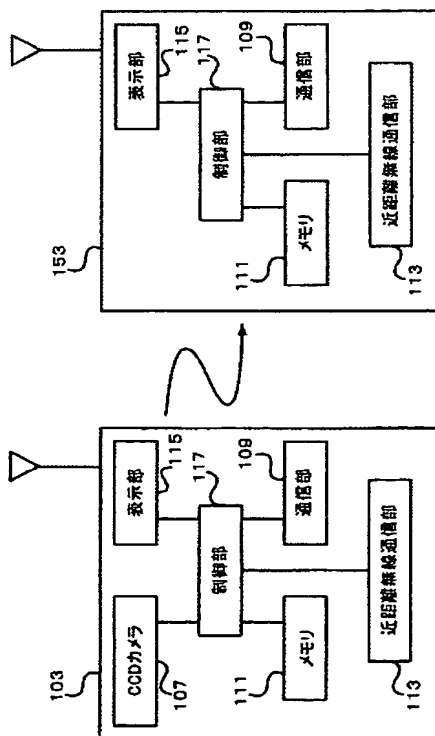
[Drawing 3]



[Drawing 4]

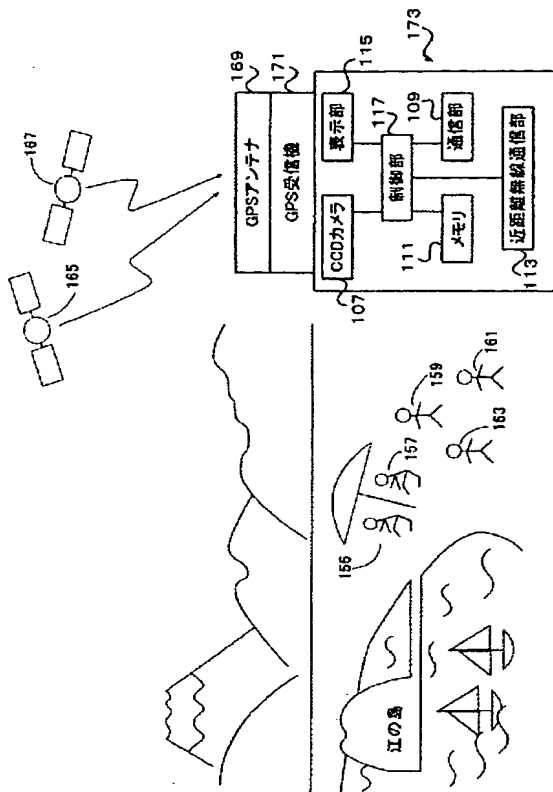


[Drawing 5]

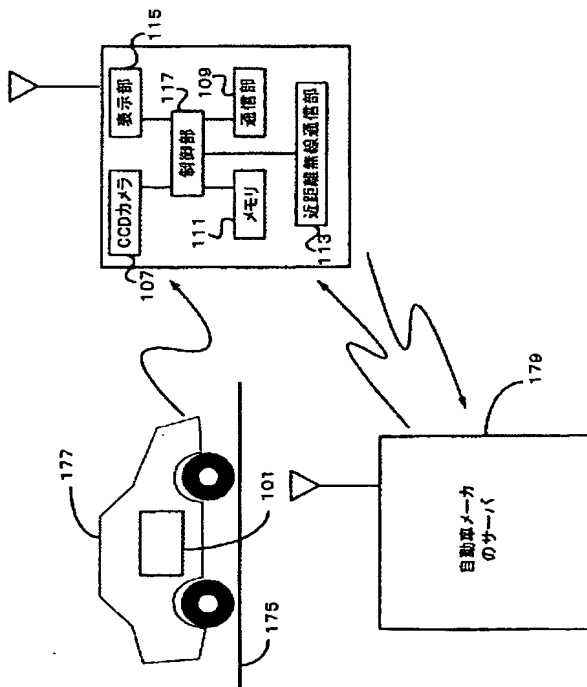




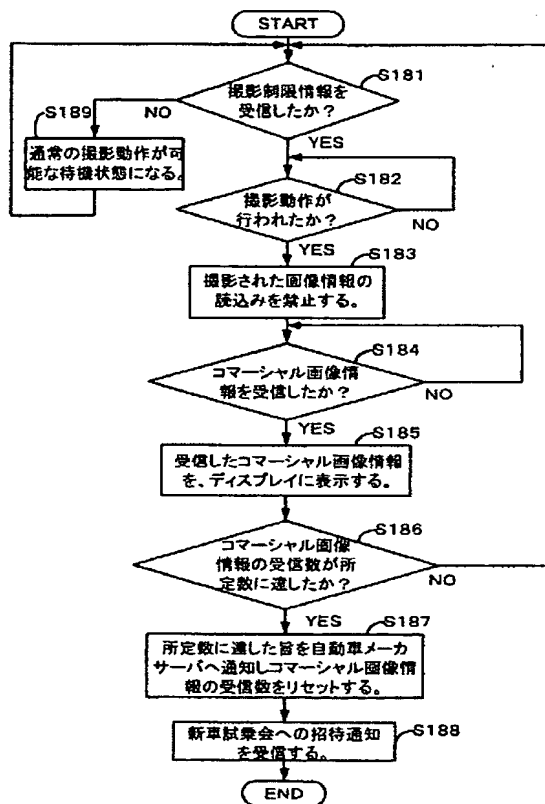
[Drawing 6]



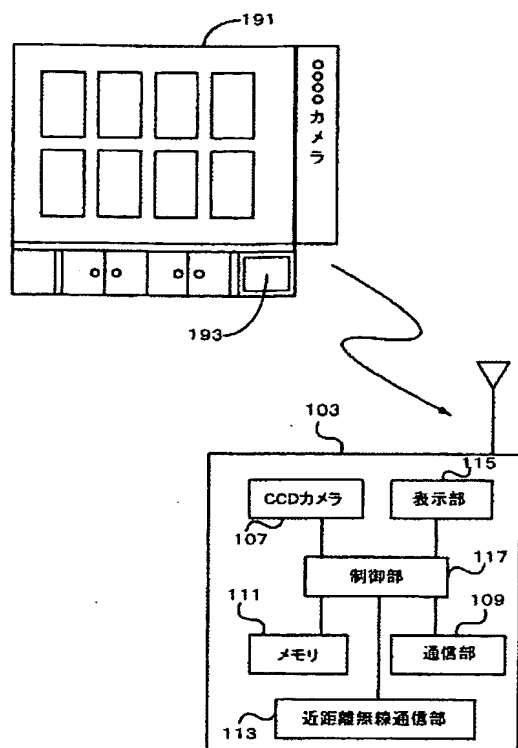
[Drawing 7]



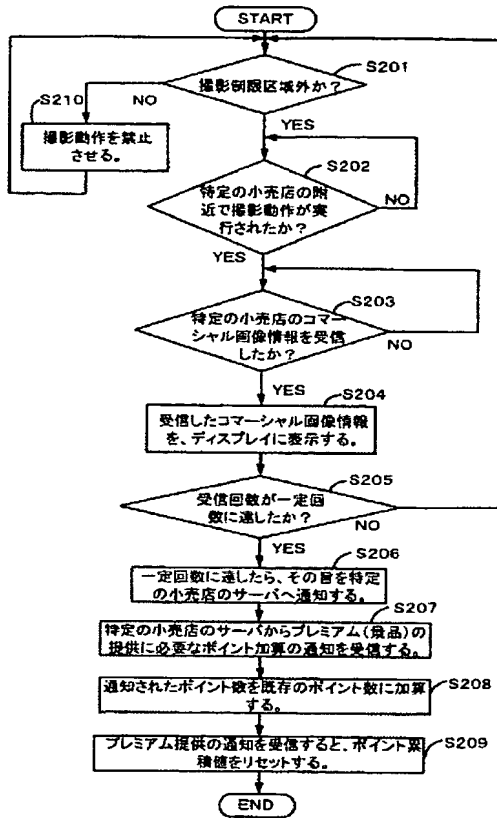
[Drawing 8]



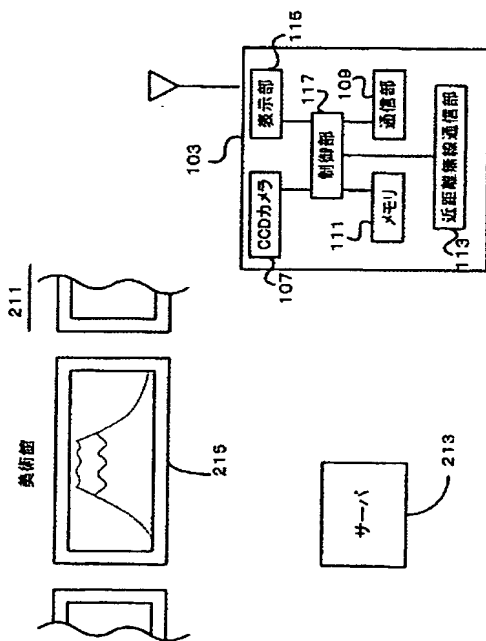
[Drawing 9]



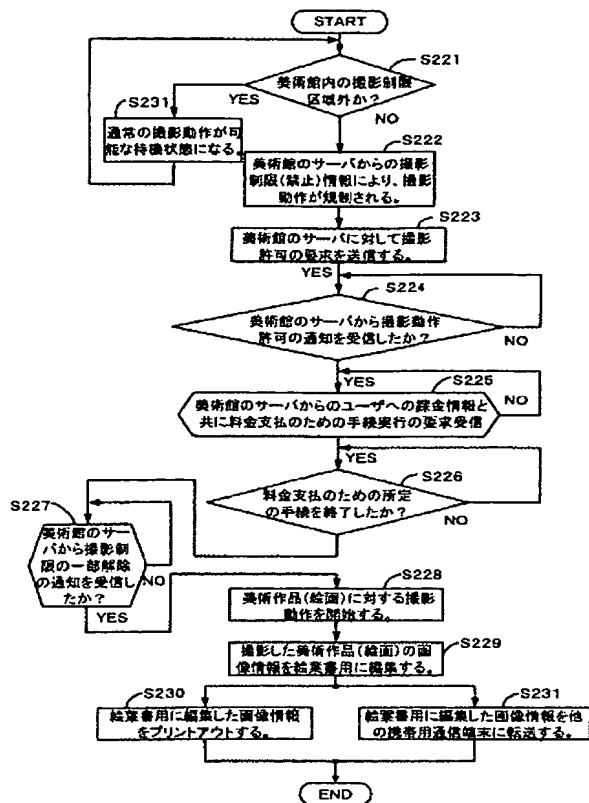
[Drawing 10]



[Drawing 11]



[Drawing 12]



[Translation done.]

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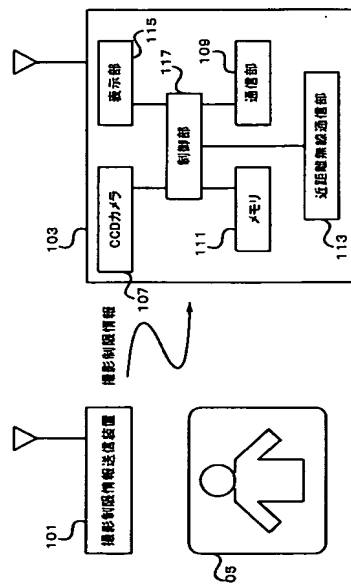
(54) 【発明の名称】 撮影装置、撮影制限システム、撮影警告システム、及び撮影制限解除システム

## (57) 【要約】

【課題】 撮影装置又は撮影手段を有する携帯端末において、撮影制限区域内での撮影制限が確実に行えるようにする。

【解決手段】 CCDカメラ107をオンにして携帯通信端末103のモードを撮影モードに設定する際、近距離無線通信部113もオンにすると、近距離無線通信部113は、撮影制限情報送信装置101から無線送信される撮影制限情報を受信可能な待機状態になる。近距離無線通信部113が撮影『否』以外の撮影制限情報を受信すると、制御部117は、その撮影制限情報に基づいてCCDカメラ107を制御することにより、被撮影物体105の撮影を撮影制限付きで行う。待機状態において、近距離無線通信部113が撮影制限情報を受信しなかった場合は、制御部117の制御下でCCDカメラ107による撮影制限無しの通常の撮影が行われる。

【選択図】 図1



**【特許請求の範囲】****【請求項 1】**

電氣的に制御される撮影手段と、  
外部の離れた装置から信号を受信する信号受信手段と、  
前記信号受信手段から出力された信号が、前記撮影手段による撮影の制御に関する制御信号であったとき、前記制御信号に応答して、前記撮影手段の撮影動作又は撮影に関連する動作を制御する撮影制御手段と、  
を備える撮影装置。

**【請求項 2】**

請求項 1 記載の撮影装置において、  
前記撮影制御手段が、前記制御信号に応答して、撮影禁止、撮影枚数制限、撮影時のフラッシュ使用禁止、撮影された画像データの撮影装置内のメモリへの保存若しくは外部出力に対する制限、及び撮影に対する課金のいずれかを行う撮影装置。

**【請求項 3】**

請求項 1 記載の撮影装置において、  
受信した制御信号に応答して、前記撮影制御手段が行う制御に関連する情報を表示する制御情報表示手段を更に備える撮影装置。

**【請求項 4】**

請求項 1 記載の撮影装置において、  
装置の筐体に、撮影時に外部へ露出することが必要なカメラ部位と、前記制御信号を外部から受け入れるアンテナ部位とを有し、該アンテナ部位を信号遮蔽材で覆ったならば前記カメラ部位も同時に覆われるように近接配置されている撮影装置。

**【請求項 5】**

請求項 1 記載の撮影装置において、  
前記撮影制御手段が、制御信号を受けてから所定時間が経過するまでの間、前記制御を継続し、その後該制御を解除する撮影装置。

**【請求項 6】**

撮影装置と、前記撮影装置に撮影制御信号を送信する撮影制御信号送信装置とを備え、  
前記撮影装置が、  
電氣的に制御される撮影手段と、  
外部の離れた装置から信号を受信する信号受信手段と、  
前記信号受信手段から出力された信号が、前記撮影制御信号送信装置から送信された前記撮影手段による撮影の制御に関する撮影制御信号であったとき、前記撮影制御信号に  
応答して、前記撮影手段の撮影動作又は撮影に関連する動作を制御する撮影制御手段と、  
を有する撮影制限システム。

**【請求項 7】**

請求項 6 記載の撮影制限システムにおいて、  
前記撮影制御信号送信装置が、撮影制限を課された被撮影対象の近傍、又は全体として撮影制限を課された閉鎖的な空間領域の入口に配置されている撮影制限システム。

**【請求項 8】**

請求項 7 記載の撮影制限システムにおいて、  
前記閉鎖的な空間領域の出口には、前記撮影制御信号送信装置から送信された撮影制御信号により前記撮影手段に撮影制限を課された撮影装置が前記出口を通過するときに、前記撮影制限が解除されるよう、撮影制限解除信号を送信する撮影制限解除信号送信装置を備える撮影制限システム。

**【請求項 9】**

請求項 7、又は請求項 8 記載の撮影制限システムにおいて、前記閉鎖的な空間領域内に配置されている複数の被撮影対象の各々に、前記撮影制御信号送信装置から送信された撮影制御信号により前記撮影手段に課された撮影制限を変更するための変更信号を前記撮影装置に送信する撮影制限変更信号送信装置を更に備える撮影制限システム。

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## 【請求項 10】

撮影装置と、撮影手段を有しない携帯端末とを備え、  
前記撮影装置が、  
電氣的に制御される撮影手段と、  
前記撮影手段による撮影動作が撮影制限を課された被撮影対象、又は撮影制限を課された空間領域内におけるものか否かを判断する判断手段と、  
前記判断手段が、撮影制限を課された被撮影対象、又は撮影制限を課された空間領域内におけるものであると判断したとき、所定の警告情報を外部に向けて送信する警告情報送信手段と、  
外部から前記警告情報を受信したとき、該警告情報に基づいて、撮影装置のユーザに対し、被撮影対象とされている旨を所定の態様で報知する報知手段とを有し、  
前記携帯端末が、  
前記撮影装置から前記警告情報を受信したとき、該警告情報に基づいて、携帯端末のユーザに対し、被撮影対象とされている旨を所定の態様で報知する報知手段を有する撮影警告システム。

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## 【請求項 11】

撮影装置と、撮影制限を課された空間領域内に存在する前記撮影装置との間で情報の授受を行うサーバとを備え、  
前記撮影装置が、  
電氣的に制御される撮影手段と、  
外部から与えられた情報に基づいて、前記撮影手段が撮影しようとする被撮影対象、又は空間領域が、撮影制限を課されているか否かを判断する判断手段と、  
前記判断手段が撮影制限を課されていると判断したとき、前記サーバに対し撮影制限の解除要求を送信する解除要求送信手段と、  
前記サーバから撮影制限解除に必要な条件が提示されたとき、該条件を満たすための処理を実行する実行手段と、  
前記サーバから撮影制限解除の通知が与えられたとき、前記撮影手段の撮影動作に課されていた制限を解除する撮影制限解除手段とを有し、  
前記サーバが、  
前記撮影装置からの撮影制限解除要求を受付けて、撮影制限解除のための条件を提示する提示手段と、  
前記撮影装置からの前記撮影制限解除のための条件を満たした旨の通知があったとき、該条件が満たされたか否かを検証する検証手段と、  
前記検証手段が、前記条件を満たされていることを検証したとき、前記撮影制限を解除する旨の通知を前記撮影装置に通知する撮影制限解除通知手段とを有する撮影制限解除システム。

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## 【発明の詳細な説明】

## 【0001】

## 【発明の属する技術分野】

本発明は、例えばデジタルスチルカメラ（以下、「デジタルカメラ」という）、或いはデジタルビデオカメラなどの撮影装置、及びデジタルカメラなどの撮影手段を内蔵した携帯通信端末による、撮影制限が課された対象や空間領域における撮影動作を有効に制限するための技術の改良に関する。

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## 【0002】

## 【従来の技術】

近年におけるデジタル技術の発達は、デジタルカメラ及びデジタルビデオカメラに係る技術革新に多大な影響を与えている。デジタルカメラでは、その高性能化や小型化が進んでおり、それに伴ってデジタルカメラを内蔵した携帯電話機又はPHS端末等の携帯通信端末が開発されている。この携帯通信端末では、デジタルカメラで撮影した静止画像データや動画データ、移動体通信網を介して他の携帯通信端末等に伝送することが可能であ

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るので、現在では上記携帯通信端末に、テレビ電話機としての機能を発揮させることもできる。一方、デジタルビデオカメラでは、撮影した動画データを移動体通信網を介して他の携帯通信端末やパソコン端末等に伝送することによって、上記動画データを携帯通信端末の表示部やパソコン端末の表示部にリアルタイムで再生することができる。

#### 【0003】

##### 【発明が解決しようとする課題】

ところで、一定規模以上の大きさの人口集積を持った都市には、映画館や劇場等の著作権法上撮影が禁止されている施設や、銀行等のような警備上の観点から撮影が禁止されている施設が複数存在する。また、各種のスポーツ施設や動物園等の施設のように、運営主体が選手のプレーへの悪影響や、動物が受けるストレス等を勘案して、可能であれば撮影時のフラッシュの使用を禁止したいと考えている施設も存在する。更には、美術館や博物館のような施設の運営主体の中には、これら各施設における撮影制限区域内での撮影に際して、ユーザに課金を行いたいと考えている運営主体も当然存在するものと予測される。

#### 【0004】

しかし、上記構成の携帯通信端末は小型であるため、例えば上述したような撮影禁止箇所であっても、持ち込みが容易であるので、撮影禁止の対象物がユーザによって盗み撮り（盗撮）される可能性がある。また、ユーザが撮影した撮影禁止の対象物の画像データを、直ちに他の場所に存在する別の携帯通信端末等に転送した後で、該画像データを上記デジタルカメラから消去してしまえば盗撮した証拠が残らないので、ユーザが撮影禁止箇所での盗撮を行ったことを運営主体側で立証するのは困難である。

#### 【0005】

なお、上記構成の携帯通信端末では、撮影対象とされる人物（被撮影者）の肖像権を保護するために、該人物自身の知らない間に盗撮されるのを防止する手段として、撮影時に携帯通信端末から擬似的なシャッター音を発するように構成することで、撮影が行われることを周囲に報知している。しかし、撮影時に上記携帯通信端末から発する音は、周囲への迷惑を考慮するとあまり大きく設定することができないため、その（撮影対象とされる人物への報知）効果は充分とは言えない。更に、デジタルビデオカメラでは、例えば撮影時にカメラレンズ部付近を発光ダイオード（LED）等を用いて発光させることで、被撮影者に撮影中であることを報知するようにしているが、盗撮防止効果については考慮されていない。

#### 【0006】

以上述べた内容から明らかなように、従来の（デジタルカメラを内蔵した）携帯通信端末及び従来のデジタルビデオカメラにおいては、撮影禁止やフラッシュの使用禁止等の撮影制限を確実に行うことは困難であり、そのため、著作権や肖像権が侵害されたり、警備上の機密が漏洩する等の問題点を有していた。また、デジタルカメラやデジタルビデオカメラ等で撮影対象とされる人物の撮影を行う場合に、被撮影者を始めとする周囲への報知が不十分であり、被撮影者本人の知らない間に盗撮される可能性があった。

#### 【0007】

従って本発明の目的は、撮影装置又は撮影手段を有する携帯端末において、撮影制限区域内での撮影制限が確実に行えるようにすることにある。

#### 【0008】

また、本発明の別の目的は、撮影装置又は撮影手段を有する携帯端末において、撮影対象とされる人物の撮影を行う場合に、被撮影者を始めとする周囲への報知が確実に行えるようにすることにより、被撮影者本人の知らない間に盗撮されないようにすることにある。

#### 【0009】

##### 【課題を解決するための手段】

本発明の第1の観点に従う撮影装置は、電氣的に制御される撮影手段と、外部の離れた装置から信号を受信する信号受信手段と、上記信号受信手段から出力された信号が、上記撮影手段による撮影の制御に関する制御信号であったとき、上記制御信号に応答して、上記撮影手段の撮影動作又は撮影に関連する動作を制御する撮影制御手段と、を備える。

## 【0010】

本発明の第1の観点に係る好適な実施形態では、上記撮影制御手段は、上記制御信号に応答して、撮影禁止、撮影枚数制限、撮影時のフラッシュ使用禁止、撮影された画像データの撮影装置内のメモリへの保存若しくは外部出力に対する制限、及び撮影に対する課金のいずれかを行う。

## 【0011】

別の実施形態では、受信した制御信号に応答して、上記撮影制御手段が行う制御に関連する情報を表示する制御情報表示手段を更に備える。

## 【0012】

上記とは別の実施形態では、装置の筐体に、撮影時に外部へ露出することが必要なカメラ部位と、上記制御信号を外部から受け入れるアンテナ部位とを有し、そのアンテナ部位を信号遮蔽材で覆ったならば上記カメラ部位も同時に覆われるように近接配置されている。

## 【0013】

また、上記とは別の実施形態では、上記撮影制御手段は、制御信号を受けてから所定時間が経過するまでの間、上記制御を継続し、その後その制御を解除する。

## 【0014】

本発明の第2の観点に従う撮影制限システムは、撮影装置と、上記撮影装置に撮影制御信号を送信する撮影制御信号送信装置とを備え、上記撮影装置は、電氣的に制御される撮影手段と、外部の離れた装置から信号を受信する信号受信手段と、上記信号受信手段から出力された信号が、上記撮影制御信号送信装置から送信された上記撮影手段による撮影の制御に関する撮影制御信号であったとき、上記撮影制御信号に応答して、上記撮影手段の撮影動作又は撮影に関連する動作を制御する撮影制御手段と、を有する。

## 【0015】

本発明の第2の観点に係る好適な実施形態では、上記撮影制御信号送信装置は、撮影制限を課された被撮影対象の近傍、又は全体として撮影制限を課された閉鎖的な空間領域の入口に配置されている。

## 【0016】

別の実施形態では、上記閉鎖的な空間領域の出口には、上記撮影制御信号送信装置から送信された撮影制御信号により上記撮影手段に撮影制限を課された撮影装置が上記出口を通過するときに、上記撮影制限が解除されるよう、撮影制限解除信号を送信する撮影制限解除信号送信装置を備える。

## 【0017】

上記とは別の実施形態では、上記閉鎖的な空間領域内に配置されている複数の被撮影対象の各々に、上記撮影制御信号送信装置から送信された撮影制御信号により上記撮影手段に課された撮影制限を変更するための変更信号を上記撮影装置に送信する撮影制限変更信号送信装置を更に備える。

## 【0018】

本発明の第3の観点に従う撮影警告システムは、撮影装置と、撮影手段を有しない携帯端末とを備え、上記撮影装置は、電氣的に制御される撮影手段と、上記撮影手段による撮影動作が撮影制限を課された被撮影対象、又は撮影制限を課された空間領域内におけるものか否かを判断する判断手段と、上記判断手段が、撮影制限を課された被撮影対象、又は撮影制限を課された空間領域内におけるものであると判断したとき、所定の警告情報を外部に向けて送信する警告情報送信手段と、外部から上記警告情報を受信したとき、その警告情報に基づいて、撮影装置のユーザに対し、被撮影対象とされている旨を所定の態様で報知する報知手段とを有し、上記携帯端末は、上記撮影装置から上記警告情報を受信したとき、その警告情報に基づいて、携帯端末のユーザに対し、被撮影対象とされている旨を所定の態様で報知する報知手段を有する。

## 【0019】

本発明の第4の観点に従う撮影制限解除システムは、撮影装置と、撮影制限を課された空間領域内に存在する上記撮影装置との間で情報の授受を行うサーバとを備え、上記撮影装

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置は、電氣的に制御される撮影手段と、外部から与えられた情報に基づいて、上記撮影手段が撮影しようとする被撮影対象、又は空間領域が、撮影制限を課されているか否かを判断する判断手段と、上記判断手段が撮影制限を課されていると判断したとき、上記サーバに対し撮影制限の解除要求を送信する解除要求送信手段と、上記サーバから撮影制限解除に必要な条件が提示されたとき、その条件を満たすための処理を実行する実行手段と、上記サーバから撮影制限解除の通知が与えられたとき、上記撮影手段の撮影動作に課されていた制限を解除する撮影制限解除手段とを有し、上記サーバは、上記撮影装置からの撮影制限解除要求を受付けて、撮影制限解除のための条件を提示する提示手段と、上記撮影装置からの上記撮影制限解除のための条件を満たした旨の通知があったとき、その条件が満たされたか否かを検証する検証手段と、上記検証手段が、上記条件を満たされていることを検証したとき、上記撮影制限を解除する旨の通知を上記撮影装置に通知する撮影制限解除通知手段とを有する。

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【0020】

【発明の実施の形態】

以下、本発明の実施の形態を、図面により詳細に説明する。

【0021】

図1は、本発明に従う撮影制限システムの第1の実施形態を示すブロック図である。

【0022】

上記撮影制限システムは、例えば映画館や劇場等の著作権法上撮影が禁止されている施設や、銀行のような警備上の観点から撮影が禁止されている施設等に構築されるもので、図1に示すように、撮影制限情報送信装置101と、携帯通信端末103とを備える。撮影制限情報送信装置101は、被撮影物体105の近傍に配置されており、撮影可／否情報、撮影枚数の制限、及びフラッシュ使用可／否等の被撮影物体105に関する撮影制限情報を無線送信する。換言すれば、被撮影物体105には、撮影『否』、撮影枚数『制限』、及びフラッシュ使用『否』等の撮影制限が、予め課せられていることになる。なお、撮影制限情報送信装置101は、図1には記載していないが、上記撮影制限情報を予め格納しているメモリと、該メモリに格納されている上記撮影制限情報を無線送信するための無線送信機と、これらを制御するための制御部とを内蔵しているものとする。一方、撮影制限情報等を受信する携帯通信端末103は、通信部109、メモリ111、近距離無線通信部113、表示部115、及び制御部117を備えるのみならず、更にデジタルカメラ、即ち、CCDカメラ107をも内蔵する。

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【0023】

携帯通信端末103において、CCDカメラ107は、制御部117の制御下で、被撮影物体105を撮影する。通信部109は、制御部117の制御下で、移動体通信網を介して他の携帯通信端末（図示しない）や情報処理端末（パソコン端末）等（図示しない）との間で情報の授受を行う。メモリ111は、制御部117の制御下で、CCDカメラ107が撮影した被撮影物体105を含む画像データや、通信部109により移動体通信網を介して他の携帯通信端末（図示しない）等から受信した諸々のデータ等を記憶する。

【0024】

近距離無線通信部113は、制御部117の制御下で、制御部117によってメモリ111から読出された諸々のデータを、上記移動体通信網を介さずに、携帯通信端末103から近距離に存在している他の携帯通信端末等（図示しない）に、直接非接触で伝送する。また、近距離無線通信部113は、制御部117の制御下で、撮影制限情報送信装置101から無線送信される上記被撮影物体105に関する撮影制限情報を受信して、該撮影制限情報を制御部117を通じてメモリ111に出力する。本実施形態では、近距離無線通信部113には、Blue tooth（ブルートゥース）（Blue tooth SIG, Inc, USAの商標）が用いられる。

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【0025】

表示部115は、制御部117の制御下で、CCDカメラ107が撮影した被撮影物体105を含む画像データや、通信部109が移動体通信網を介して他の携帯通信端末など（

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図示しない) から受信した諸々のデータ等を、所定の表示態様で表示する。制御部 117 は、CCDカメラ 107、通信部 109、メモリ 111、近距離無線通信部 113、及び表示部 115 を制御する。

#### 【0026】

次に、上記構成の撮影制限システムにおいて、被撮影物体 105 (上述したように、撮影『否』、撮影枚数『制限』、フラッシュ使用『否』等の撮影制限が予め課せられている) を、携帯通信端末 103 (の CCD カメラ 107) を用いて撮影する場合の処理流れを説明する。

#### 【0027】

図 1 において、撮影制限情報送信装置 101 は、被撮影物体 105 に関する上述したような撮影制限情報 (即ち、被撮影物体 105 に関する撮影『否』、撮影枚数『制限』、フラッシュ使用『否』等のいずれかの情報) を、連続的或いは断続的に無線送信している。一方、携帯通信端末 103 側では、ユーザが CCD カメラ 107 をオン状態にして該携帯通信端末 103 のモードを撮影モードに設定する際に、近距離無線通信部 113 についてもオン状態にすると、それにより近距離無線通信部 113 は、撮影制限情報送信装置 101 から無線送信される上述した撮影制限情報を受信可能な待機状態になる。

#### 【0028】

この待機状態において、近距離無線通信部 113 が上記撮影『否』以外の撮影制限情報を受信すると、制御部 117 は、該撮影制限情報に基づいて CCD カメラ 107 を制御することにより、被撮影物体 105 の撮影を撮影制限付きで行う。なお、上記待機状態において、近距離無線通信部 113 が上記撮影制限情報を受信しなかった場合には、制御部 117 の制御下で携帯通信端末 103 (CCD カメラ 107) による撮影制限無しの通常の撮影が行われる。撮影『否』以外の撮影制限については、夫々以下で個別に説明する。

#### 【0029】

上述した撮影制限情報が、撮影『否』であることを制御部 117 が認識したとき、つまり、被撮影物体 105 が撮影禁止の場合には、制御部 117 は、撮影動作を禁止するための指令を CCD カメラ 107 に出力する。或いは、CCD カメラ 107 の撮影動作は禁止せずに、CCD カメラ 107 が撮影した被撮影物体 105 を含む画像データのメモリ 111 への制御部 117 による書込みを禁止する手法も想定され得る。

#### 【0030】

次に、上述した撮影制限情報が、被撮影物体 105 に関する撮影枚数『制限』であることを制御部 117 が認識したときには、制御部 117 は、CCD カメラ 107 が撮影した画像データの枚数を加算する。そして、その加算値が予め設定されている被撮影物体 105 の撮影制限枚数に達したことを認識すると、制御部 117 は、CCD カメラ 107 による撮影動作を禁止すべく、CCD カメラ 107 を制御する。

#### 【0031】

次に、上述した撮影制限情報中に、上記撮影枚数『制限』情報や、フラッシュ使用『否』情報等に加えて、被撮影物体 105 に係る撮影制限内容を表示すべき旨の指令が含まれていることを制御部 117 が認識したときには、制御部 117 は、上記指令に基づき、表示部 115 を制御して上記撮影制限内容に係る情報を、表示部 115 に表示する。また、上述した撮影制限情報が、撮影『否』情報、即ち、被撮影物体 105 が撮影禁止である旨の情報に加えて、被撮影物体 105 の撮影禁止を表示すべき旨の指令が含まれていることを制御部 117 が認識したときには、制御部 117 は、上記指令に基づき、表示部 115 を制御して上記撮影禁止に係る情報を、表示部 115 に表示する。

#### 【0032】

この場合、上述したように、CCD カメラ 107 の撮影動作が制御部 117 によって禁止されるか、又は CCD カメラ 107 が撮影した画像データの制御部 117 自身によるメモリ 111 への書込み動作の禁止の何れかが行われる。しかし、制御部 117 が、これら撮影動作の禁止、又は撮影関連動作の禁止を行わずに、ユーザに対し被撮影物体 105 が撮影禁止である旨を警告するための処理動作として、被撮影物体 105 が撮影禁止である旨

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を表示部 111 に表示する処理動作だけを行うようにしても良い。

#### 【0033】

なお、撮影制限情報送信装置 101 から無線送信される撮影制限情報の送信レベルを、例えばユーザが上述した被撮影物体 105 から半径数メートル以内の範囲に接近しない限り、該ユーザの携帯通信端末 103 が受信できないレベルに設定しておけば、被撮影物体 105 の近傍で被撮影物体 105 以外のものを撮影しようとする場合の携帯通信端末 103 の誤動作を低減することができる。また、映画館のような、場内全体で撮影制限（撮影禁止）が課されている施設に、上記のように撮影制限情報の無線送信レベルを低く設定した撮影制限情報送信装置 101 を用いる場合には、場内の何れの場所においても上記携帯通信端末 103 が上記撮影制限情報を受信できるように、複数台の撮影制限情報送信装置 101 を場内の適宜な複数の箇所に夫々設置することによって対処できる。

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#### 【0034】

なお、携帯通信端末 103 において、CCD カメラ 107 以外の部分を、電波を遮蔽する材料によって覆うことにより、近距離無線通信部 113 が撮影制限情報送信装置 101 からの撮影制限情報を受信できないようにして、撮影制限が行えないようにする不正については、携帯通信端末 103 を、以下のような構成とすることによって対処することが可能である。即ち、撮影時に携帯通信端末 103 の筐体から外部へ露出することが必要なカメラ部位である CCD カメラ 107 と、撮影制限情報を撮影制限情報送信装置 101 から受信する近距離無線通信部 113 のアンテナ部分とが、該アンテナ部分を電波遮蔽材料によって覆ったならば CCD カメラ 107 も同時に覆われるような、CCD カメラ 107 とアンテナ部分とが携帯通信端末 103 の筐体において近接配置されている構成である。上記のように、CCD カメラ 107 と近距離無線通信部 113 のアンテナ部分とを携帯通信端末 103 の筐体において近接配置することにより、CCD カメラ 107 まで上記電波遮蔽材料によって覆われないと、近距離無線通信部 113 へ入射しようとする撮影制限情報の電波を遮蔽できなくなる。また、近距離無線通信部 113 として、無線 LAN を用いた場合であっても上記と同様の効果が得られるし、電波以外の例えば I r D A ( I n f r a r e d D a t a A s s o c i a t i o n の略記) のような赤外線によるデータ通信であっても上記と同様の効果が得られる。

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#### 【0035】

以上説明したように、本発明に従う撮影制限システムの第 1 の実施形態によれば、撮影制限情報送信装置 101 から無線送信される撮影制限情報を、携帯通信端末 103 に備えた近距離無線通信部 113 で受信して、携帯通信端末 103 の各部を制御するための制御部 117 へと出力する構成とすることにより、撮影機能を有する携帯通信端末 103 において、映画館や、劇場や、銀行等の撮影制限区域内での撮影禁止やフラッシュの使用禁止等の撮影制限が、容易、且つ確実に行えるようにすることができる。よって、個人の肖像権や、著作権等が侵害されたり、銀行等のような施設における警備上の機密が漏れるなどの問題点を改善することができる。更に、美術館などの施設では、各種の美術品の撮影に対して、容易に課金することも可能である。なお、本実施形態では、撮影制限情報送信装置 101 は、被撮影物体 105 の近傍に配置されているものとして説明したが、施設の係員等が携帯していても良い。また、本実施形態は、CCD カメラ 107 を内蔵した携帯通信端末 103 のみならず、デジタルビデオカメラにも適用が可能である。

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#### 【0036】

図 2 は、本発明に従う撮影制限システムの第 2 の実施形態を示すブロック図である。

#### 【0037】

上記撮影制限システムは、例えば映画館や劇場のような、施設内の略全てのエリアが撮影制限（禁止）エリアに設定されている施設に構築されるもので、図 1 に示した携帯通信端末 103、及び被撮影物体 105 に加えて、撮影制限情報送信装置 123 と、リセット信号送信機 125 とを備える。

#### 【0038】

撮影制限情報送信装置 123 は、図 1 に記載の撮影制限情報送信装置 101 と略同一の機

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能を果たすもので、図2に示すように、撮影禁止エリア121の入口121a、若しくは該入口121aの近傍に配置されており、上記撮影制限情報を連続的或いは断続的に撮影禁止エリア121内の携帯通信端末103に無線送信する。撮影制限情報送信装置123は、上記撮影制限情報を予め格納しているメモリ127と、該メモリ127に格納されている上記撮影制限情報を無線送信するための無線送信機129と、メモリ127、及び無線送信機129を制御するための制御部131とを内蔵している。

#### 【0039】

一方、リセット信号送信機125は、撮影禁止エリア121の出口121b、若しくは該出口121bの近傍に配置されており、撮影禁止エリア121内において撮影制限情報送信装置123からの撮影制限情報により上記携帯通信端末103に課せられた撮影制限をリセットすべく、該携帯通信端末103にリセット信号を無線送信する。

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#### 【0040】

次に、上記構成の撮影制限システムにおいて、上記携帯通信端末103を携行したユーザが上記撮影禁止エリア121に入場したときに、システム各部が実行する処理動作について説明する。

#### 【0041】

図2において、上記携帯通信端末103を携行したユーザが入口121aより撮影制限エリア121内に入場しようとする、撮影制限情報送信装置123の無線送信機129からの上記(被撮影物体105に係る)撮影制限情報が、携帯通信端末103の近距離無線通信部113により受信されて、携帯通信端末103のメモリ111にダウンロードされる。これにより、ユーザが撮影制限エリア121内で上記携帯通信端末103を用いて撮影を行う場合に、制御部117が、メモリ111内の上記撮影制限情報に基づいてCCDカメラ107の撮影動作を制御することになるから、ユーザが被撮影物体105を撮影しようとしてCCDカメラ107をオン状態にしても、制御部117によりCCDカメラ107の有効な撮影動作が規制される。

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#### 【0042】

次に、上記ユーザが出口121bを通過して撮影制限エリア121から外部へ出場しようとする、リセット信号送信機125からの上記リセット信号が、携帯通信端末103の近距離無線通信部113により受信されて、近距離無線通信部113から制御部117へ伝送される。上記リセット信号を読み込むことにより、制御部117は、メモリ111内に格納されている上記撮影制限情報をリセットする。

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#### 【0043】

ところで、上記撮影制限システムでは、携帯通信端末103を携行したユーザが、出口121bを通過して撮影制限エリア121から外部へ出場した場合でも、リセット信号送信機125からのリセット信号が携帯通信端末103の近距離無線通信部113によって受信されなければ、携帯通信端末103に課された上記撮影制限はリセットされない。そのため、携帯通信端末103がリセット信号送信機125からのリセット信号を受信し切れないままで、上記ユーザが撮影制限エリア121の外へ出場した場合には、撮影制限エリア121の外においても、携帯通信端末103に撮影制限が課された状態が継続するという不具合が生じることになる。

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#### 【0044】

そこで、例えば撮影制限情報送信装置123から撮影制限情報と共に計時動作開始指令をも無線送信するようにしておき、ユーザと共に入口121aを通過した携帯通信端末103がこの計時動作開始指令を上記撮影制限情報と共に受信したとき、制御部117が計時動作を開始し、計測した時間値が予め設定された時間値に達した時点で、携帯通信端末103に課された撮影制限をリセットするようにすれば、携帯通信端末103がリセット信号送信機125からのリセット信号を受信できなかった場合にも、上記のような不具合の発生を防止することができる。

#### 【0045】

以上説明したように、本発明に従う撮影制限システムの第2の実施形態によれば、例えば

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映画館や劇場のような、施設内の略全てのエリアが撮影制限（禁止）エリア１２１に設定されている施設の入口１２１aにおいて、撮影制限情報が入口１２１aを通過する全ての携帯通信端末１０３に対し、撮影制限情報送信装置１２３から一律に撮影制限情報をダウンロードするため、上述した第１の実施形態における略同様の効果が得られるうえに、撮影制限されている被撮影物体毎に撮影制限情報送信装置（１２３）を設ける必要がないから、システムの構成を簡単化でき、コスト低下も図ることができる。

#### 【００４６】

更に、ユーザが撮影制限エリア１２１に入場しようとする際に、被撮影物体１０５に対する撮影料金を施設管理者に支払った場合には、該ユーザに対して被撮影物体１０５の撮影を許可することができるし、被撮影物体１０５の撮影枚数についても制限することができるから、撮影制限が課された被撮影物体１０５の撮影に対して課金を行うこともできる。なお、撮影制限情報送信装置１２３からの撮影制限情報のダウンロードは、ユーザが入口１２１aを通過するときだけに限ることなく、撮影制限（禁止）エリア１２１内において、随所で行っても差支えない。なお、本実施形態は、ＣＣＤカメラ１０７を内蔵した携帯通信端末１０３のみならず、デジタルビデオカメラにも適用が可能である。

#### 【００４７】

図３は、本発明に従う撮影制限システムの第３の実施形態を示すブロック図である。

#### 【００４８】

上記撮影制限システムは、図３に示すように、撮影制限内容変更情報送信装置１３３を撮影制限エリア１２１内の撮影制限を課された被撮影物体１０５毎に設置した点（図示の都合上、被撮影物体１０５も撮影制限内容変更情報送信装置１３３も共に１個ずつしか記載していない）において、図２に記載のシステムと相違する。その他の構成については、図２に記載のシステムにおける同様である。各々の撮影制限内容変更情報送信装置１３３は、撮影制限情報送信装置１２３から入口１２１aを通過するユーザの携帯通信端末１０３に対して一律にダウンロードされた撮影制限情報の内容に変更を加えるための撮影制限内容変更情報を送信する。各々の撮影制限内容変更情報送信装置１３３は、撮影制限内容変更情報の他にも、対応する被撮影物体（１０５）が撮影制限されている旨を携帯通信端末１０３に対して通知するための通知情報も無線送信する。

#### 【００４９】

換言すれば、上記システムでは、ユーザが携帯通信端末１０３を用いて撮影制限が課されている被撮影物体（１０５）を撮影する際に、携帯通信端末１０３が対応する撮影制限内容変更情報送信装置（１３３）からの撮影制限内容変更情報を受信して、該変更情報を、撮影制限情報送信装置１２３からの撮影制限情報に付加することにより、被撮影物体（１０５）毎に撮影制限内容を変更できるようにしたものである。

#### 【００５０】

次に、上記構成の撮影制限システムにおける各部の処理動作を、図４のフローチャートにより説明する。

#### 【００５１】

図４において、携帯通信端末１０３を携行したユーザが入口１２１aより撮影制限エリア１２１内に入場しようとする、撮影制限情報送信装置１２３の無線送信機１２９からの上記撮影制限情報が、携帯通信端末１０３の近距離無線通信部１１３により受信されて、携帯通信端末１０３のメモリ１１１にダウンロードされる（ステップＳ１４１）。次に、ユーザが撮影制限エリア１２１内に撮影したい被撮影物体（１０５）を見出したことで、例えば携帯通信端末１０３の操作部（図示しない）にあるＣＣＤカメラ起動用ボタン（図示しない）が操作された旨の通知を上記操作部から受けれると（ステップＳ１４２でＹｅｓ）、制御部１１７は、ＣＣＤカメラ１０７をオン状態に制御して、携帯通信端末１０３を撮影モードに設定する（ステップＳ１４３）。

#### 【００５２】

次に、制御部１１７は、近距離無線通信部１１３をもオン状態に制御して、撮影対象である被撮影物体（１０５）に対応する撮影制限内容変更情報送信装置（１３３）からの撮影

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制限内容変更情報を受信可能な待機状態にする（ステップS144）。この待機状態において、近距離無線通信部113が撮影制限内容変更情報を受信した場合には（ステップS145でYes）、ステップS141で撮影制限情報送信装置123からダウンロードされた撮影制限情報に上記撮影制限内容変更情報の内容を付加した条件下で、携帯通信端末103は被撮影物体（105）の撮影を実行する（ステップS146）。

#### 【0053】

一方、上記待機状態において、近距離無線通信部113が撮影制限内容変更情報を受信しなかった場合には（ステップS145でNo）、ステップS141で撮影制限情報送信装置123からダウンロードされた撮影制限情報に基づいて、携帯通信端末103は被撮影物体（105）の撮影を実行する（ステップS147）。なお、ステップS142からステップS146、又はステップS147に至る処理動作は、例えば上記CCDカメラ起動ボタン（図示しない）がユーザによってオフにされるなどの、ユーザが撮影制限エリア121から外へ出場する意思有りとは推定し得る何らかの操作がなされるまでの間継続される（ステップS148でNo）。

#### 【0054】

次に、上記ユーザが出口121bを通過して撮影制限エリア121から外部へ出場しようとしている意思を確認すると（ステップS148でYes）、リセット信号送信機125からの上記リセット信号が、近距離無線通信部113により受信されて（ステップS149）、近距離無線通信部113から制御部117へ出力される。上記リセット信号を読み込むことにより、制御部117は、メモリ111内に格納されている上記撮影制限情報をリセットする（ステップS150）。

#### 【0055】

以上説明したように、本発明に従う撮影制限システムの第3の実施形態によれば、第2の実施形態におけると同様の効果が得られるうえに、各々の被撮影物体（105）毎に撮影制限内容変更情報送信装置133を設置して、ユーザが携帯通信端末103を用いて各々の被撮影物体（105）を撮影しようとする際に、該被撮影物体（105）に対応する撮影制限内容変更情報送信装置（133）からの撮影制限内容変更情報を受信することとしたので、撮影制限エリア121内において、各々の被撮影物体（105）毎に撮影制限内容を変更することが可能である。なお、本実施形態は、CCDカメラ107を内蔵した携帯通信端末103のみならず、デジタルビデオカメラにも適用が可能である。

#### 【0056】

図5は、本発明に従う撮影警告システムの一実施形態を示すブロック図である。

#### 【0057】

上記撮影警告システムは、図5に示すように、デジタルカメラ、即ち、CCDカメラを内蔵した携帯通信端末103と、デジタルカメラ（CCDカメラ）を内蔵していない携帯通信端末153とで構成される。携帯通信端末103と、携帯通信端末153とは、携帯通信端末103だけがCCDカメラ107を内蔵している点を除いて、双方の内部構成は同一である。即ち、携帯通信端末103、153は、共に、図1乃至図3で夫々説明したような機能を果たす通信部109、メモリ111、近距離無線通信部113、表示部115、及び制御部117を内蔵している。

#### 【0058】

なお、近距離無線通信部113には、上述したように、Blue tooth（ブルートゥース）（Blue tooth SIG, Inc, USAの商標）が用いられ、近距離無線通信部113は、オン状態を連続させると、携帯通信端末103がこれから撮影動作を開始すべき旨の情報（撮影動作開始情報）を周辺に連続的に送信し続ける。これに対して、近距離無線通信部113のオン状態を断続させた場合には、上記撮影動作開始情報を周辺に断続的に送信することになる。

#### 【0059】

次に、上記構成の撮影警告システムにおいて、上記携帯通信端末103を携行したユーザが撮影を行おうとして撮影制限（禁止）エリアに入場したときなどに、システム各部が実

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行する処理動作について説明する。

【0060】

図5において、携帯通信端末103を携行するユーザが、CCDカメラ107をオン状態にして該携帯通信端末103のモードを撮影モードに設定する際に、近距離無線通信部113についてもオン状態にすると、それにより近距離無線通信部113は、撮影動作開始情報を周辺に連続的、又は断続的に送信する。

【0061】

一方、携帯通信端末153を携行しているユーザが、近距離無線通信部113を連続的、又は断続的にオン状態にして、上記携帯通信端末103側の近距離無線通信部113から連続的、又は断続的に無線送信される撮影動作開始情報を、連続的、又は断続的に受信して、該撮影動作開始情報を制御部117に出力する。制御部117は、該撮影動作開始情報を読込むと、携帯通信端末153に内蔵されているスピーカ（図示しない）を制御して、該スピーカ（図示しない）から所定の警告音を発したり、或いは、表示部115を制御して、表示部115に所定の警告メッセージを表示させたり、或いは、携帯通信端末153に備えられるバイブレーション機構（図示しない）を起動することなどにより、携帯通信端末153を携行するユーザに対して、近くで撮影が行われようとしていることを認識させる。

【0062】

なお、携帯通信端末103の撮影動作に際して、上記撮影動作開始情報の無線送信と共に、擬似的なシャッター音をも発するように上記携帯通信端末103を構成すれば、携帯通信端末153を携行していないユーザに対しても、これから撮影動作が開始される旨を認識させることができる。また、ビデオカメラのような連続的な撮影動作が行えるデジタル撮影機器に対しては、撮影動作中に連続的、又は断続的に撮影動作が行われている旨の警告情報を、該デジタル撮影機器から無線送信が行えるように、該デジタル機器を構成することも可能である。

【0063】

以上説明したように、本発明に従う撮影警告システムの一実施形態によれば、ユーザが携行している携帯通信端末103のCCDカメラ107を用いて撮影を行おうとするときに、被撮影物体（105）や、他の人物等が盗み撮りされるのを防止するため、撮影動作時等に所定の音響を発するようにすると共に、近距離無線通信部113を通じて上記撮影動作開始情報等を携帯通信端末103の周辺に無線送信することによって、これから撮影動作が開始される旨の警告を、より確実に周辺の人々などに認識させることが可能である。よって、撮影対象にされた人物が全く気付かないうちに、盗み撮りされるような不具合を防止することができる。

【0064】

図6は、本発明に従う撮影制限システムを、野外における無条件の撮影を規制すべき場所に適用した一例を示す説明図である。

【0065】

図6に示した例では、野外における無条件の撮影を規制すべき場所として、真夏の湘南海岸のような、大勢の水着姿の若い女性（155、157、159、161、163）で混雑する海水浴場を想定している。また、該システムでは、上述した携帯通信端末103の構成に加えて、複数のGPS衛星（165、167）からの電波を受信するGPSアンテナ169、及び該受信した電波から測位情報を取得するGPS受信機171をも備える構成の携帯通信端末173が採用されている。

【0066】

GPS受信機171からの測位情報が、携帯通信端末173を携行しているユーザの現在位置が湘南海岸であることを示している場合には、制御部117は、既述のように、CCDカメラ107の撮影動作を禁止するか、或いはCCDカメラ107が撮影した画像データの制御部117自身によるメモリ111への書込み動作を禁止する。これにより、水着姿の若い女性（155～163）が無断で第三者によって無制限に撮影されるのを防止で

きるから、これら水着姿の若い女性（１５５～１６３）の肖像権は保護される。

【００６７】

なお、上記若い女性（１５５～１６３）が、個々に、例えば図１で示したような撮影制限情報送信装置１０１などを携行して、撮影制限情報送信装置１０１から連続的又は断続的に上述したような撮影制限情報を受信することにより、これら若い女性に一定距離まで接近したユーザの携帯通信端末１０３によるこれら若い女性の水着姿の盗み撮りを防止することも可能である。なお、図６に示した例では、ＣＣＤカメラ１０７を内蔵した携帯通信端末１０３を用いた撮影動作について説明したが、図６に示した例において、デジタルビデオカメラを用いる場合の撮影動作についても、上記と同様に撮影制限は可能である。

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【００６８】

図７は、本発明に従う撮影制限システムを、野外における無条件の撮影を規制すべき場所に適用した別の例を示す説明図である。

【００６９】

図７に示した例では、野外における無条件の撮影を規制すべき場所として、自動車メーカーの管理下にある新型車のテストコースを想定している。また、該システムでは、テストコース１７５を走行する各々の新型車（１７７）に、例えば図１で示したような撮影制限情報送信装置１０１を搭載して、撮影制限情報送信装置１０１から連続的又は断続的に上述したような撮影制限情報を受信することにより、テストコース１７５に一定距離まで接近したユーザの携帯通信端末１０３による各新型車（１７７）の盗み撮りを規制している。更に、該システムには、上記各新型車（１７７）を撮影しようとする各携帯通信端末（１０３）に対し、種々の情報を無線通信によって提供するために、自動車メーカーの管理下にサーバ１７９が設置されている。

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【００７０】

図８は、図７に記載の撮影制限システムにおける各部の処理動作を示すフローチャートである。

【００７１】

図８において、テストコース１７５に一定距離まで接近したユーザの携帯通信端末１０３（の近距離無線通信部１１３）が、新型車１７７に搭載されている撮影制限情報送信装置１０１から撮影制限情報として撮影禁止情報を受信すると（ステップＳ１８１でＹｅｓ）、ユーザの操作によりＣＣＤカメラ１０７が撮影動作を行ったか否かをチェックする（ステップＳ１８２）。このチェックの結果、ＣＣＤカメラ１０７が撮影動作を行ったと判断すると（ステップＳ１８２でＹｅｓ）、制御部１１７は、ＣＣＤカメラ１０７からの画像情報をメモリ１１１に書込む処理を中止する（ステップＳ１８３）。

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【００７２】

次に、制御部１１７は、近距離無線通信部１１３が、自動車メーカーのサーバ（以下、「サーバ」と略記する）１７９から例えば新型車（１７７）の価格を字幕で表示した該自動車メーカー自身の商業画像情報を受信したか否かをチェックする（ステップＳ１８４）。このチェックの結果、近距離無線通信部１１３が上記商業画像情報を受信したことを確認すると（ステップＳ１８４でＹｅｓ）、上記商業画像情報を表示部１１５に表示する（ステップＳ１８５）と共に、メモリ１１１内に設定されている受信数カウンタに「１」を加算する。次に、制御部１１７は、上記受信数カウンタのカウント値をチェックすることにより、近距離無線通信部１１３が受信した商業画像情報の受信数が、予め設定された所定数に達したか否かを確認する（ステップＳ１８６）。この確認の結果、商業画像情報の受信数が所定数に達していなければ（ステップＳ１８６でＮｏ）、ステップＳ１８１の処理動作に復帰する。

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【００７３】

一方、上記確認の結果、商業画像情報の受信数が所定数に達していれば（ステップＳ１８６でＹｅｓ）、制御部１１７は、商業画像情報の受信数が所定数に達した旨を近距離無線通信部１１３を通じてサーバ１７９に通知すると共に、上記受信数カウ

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ンタのカウンタ値をリセットする（ステップS187）。そして、サーバ179から新車試乗会への招待通知があると、制御部117は近距離無線通信部113を通じて該通知を受信することになる（ステップS188）。ステップS181で、上記撮影制限情報を受信しなければ、制御部117は、携帯通信端末103（CCDカメラ107）が撮影制限無しの通常の撮影が実行可能なように、CCDカメラ107を制御する（ステップS189）。

#### 【0074】

なお、ステップS184で、サーバ179から携帯通信端末103に無線送信されるコマercial画像情報は、上述した自動車メーカ自身のものに限定されず、別の業種の企業からの依頼によるコマercial画像情報であっても差支えない。この場合には、該自動車メーカは、広告を依頼した企業から当然に広告料収入を得ることができる。図7、及び図8に示した例では、CCDカメラ107を内蔵した携帯通信端末103を用いた撮影動作について説明したが、図7、及び図8に示した例において、デジタルビデオカメラを用いる撮影動作についても、上記と同様の処理動作が可能である。

#### 【0075】

図9は、本発明に従う携帯通信端末を用いたコマercial情報提供システムの一例を示す説明図である。

#### 【0076】

図9に示したシステムでは、携帯通信端末103を携行したユーザが、例えば家電製品等の量販店である〇〇〇〇カメラ191の店先を通行中に、携帯通信端末103（のCCDカメラ107）を用いて撮影動作を実行することで、〇〇〇〇カメラ191の店内に設置されているサーバ193から、〇〇〇〇カメラ191に係るコマercial情報が画像情報として携帯通信端末103に無線送信されるように構成されている。

#### 【0077】

図10は、図9に記載のコマercial情報提供システムにおける各部の処理動作を示すフローチャートである。

#### 【0078】

図10において、携帯通信端末103を携行したユーザの現在位置が、既述のような撮影制限区域の外であれば、近距離無線通信部113は、図1で示したような撮影制限情報送信装置101からの撮影制限情報を受信することがない（ステップS201でYes）。そのため、制御部117は、携帯通信端末103（CCDカメラ107）が撮影制限無しの通常の撮影が実行可能なように、CCDカメラ107を制御する。次に、制御部117は、ユーザがCCDカメラ107を用いて上記〇〇〇〇カメラ191の付近で撮影動作を実行したか否かをチェックする（ステップS202）。このチェックの結果、撮影動作が行われたと判断すると（ステップS202でYes）、制御部117は、近距離無線通信部113が、上記〇〇〇〇カメラ191のサーバ193からのコマercial画像情報を受信したか否かをチェックする（ステップS203）。

#### 【0079】

このチェックの結果、近距離無線通信部113が上記コマercial画像情報を受信したことを確認すると（ステップS203でYes）、上記コマercial画像情報を表示部115に表示する（ステップS204）と共に、メモリ111内に設定されている受信回数カウンタに「1」を加算する。次に、制御部117は、上記受信回数カウンタのカウンタ値をチェックすることにより、近距離無線通信部113が受信したコマercial画像情報の受信回数が、予め設定された所定回数に達したか否かをチェックする（ステップS205）。このチェックの結果、コマercial画像情報の受信回数が所定回数に達していなければ（ステップS205でNo）、ステップS201の処理動作に復帰する。

#### 【0080】

一方、上記チェックの結果、コマercial画像情報の受信回数が所定回数に達していれば（ステップS205でYes）、制御部117は、コマercial画像情報の受信回数が所定回数に達した旨を近距離無線通信部113を通じてサーバ193に通知すると共に、上

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記受信回数カウンタのカウント値をリセットする（ステップS206）。そして、〇〇〇〇カメラ191からのプレミアム（例えば景品）の提供をユーザが受けるためのポイント加算の通知を、近距離無線通信部113がサーバ193より受信すると（ステップS207）、制御部117は、通知されたポイント数をメモリ111内に設定されているポイント数カウンタに加算する（ステップS208）。

#### 【0081】

次に、近距離無線通信部113が、サーバ193からプレミアム提供の通知を受信すると、上記ポイント数カウンタのカウント値をリセットし、一連の処理動作を終了する（ステップS209）。ステップS201で、上記撮影制限情報を受信していれば、制御部117は、携帯通信端末103（CCDカメラ107）が上記撮影制限情報に基づく撮影制限を受けて通常の撮影が実行不可能なように、CCDカメラ107を制御する（ステップS210）。なお、ステップS203で、サーバ193から携帯通信端末103に無線送信されるコマーシャル画像情報は、上述した〇〇〇〇カメラ191自身のものに限定されず、別の企業からの依頼によるコマーシャル画像情報であっても差支えない。この場合には、〇〇〇〇カメラ191は、広告を依頼した上記企業から当然に広告料収入を得ることができる。図9、及び図10に示したシステムでは、CCDカメラ107を内蔵した携帯通信端末103を用いることとして説明したが、携帯通信端末103に代えてデジタルビデオカメラを用いることとしても、上記と同様の処理動作が可能である。

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#### 【0082】

図11は、本発明に従う携帯通信端末を用いた撮影制限解除システムの一例を示す説明図である。

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#### 【0083】

図11に示したシステムでは、例えば撮影制限区域である美術館211内において、ユーザの携行する携帯通信端末103が、美術館211内に設置されるサーバ213からの撮影許可の通知を受け、且つ、該ユーザが携帯通信端末103を用いて課金された撮影料金を支払うための所定の手続を完了した旨をサーバ213に通知することによって、被撮影物体である絵画215等の美術品の撮影が始めて可能になるよう構成されている。また、携帯通信端末103には、例えばサーバ213からダウンロードされる編集・転送用プログラムによって、被撮影物体である絵画215の画像情報を絵葉書用に編集してプリントアウトしたり、或いは別の携帯通信端末（103）等に転送することが可能になる機能が付与される。

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#### 【0084】

図12は、図11に記載の撮影制限解除システムにおける各部の処理動作を示すフローチャートである。

#### 【0085】

図12において、携帯通信端末103を携行したユーザの現在位置が、美術館211内であれば（ステップS221でNo）、近距離無線通信部113は、図1で示したような撮影制限情報送信装置101からの撮影制限情報を受信すると共に、サーバ213からの編集・転送用プログラムをも受信することになる。そのため、制御部117は、上記撮影制限情報に基づいてCCDカメラ107による撮影動作を規制すべく、CCDカメラ107を制御する（ステップS222）。この状態で、例えば携帯通信端末103の操作部にある特定のボタンが（ユーザによって）操作されたことを認識すると、制御部117は、近距離無線通信部113を通じてサーバ213に対し、撮影許可の要求を無線送信する（ステップS223）。

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#### 【0086】

次に、サーバ213から無線送信される撮影許可の通知が、近距離無線通信部113によって受信されたか否かをチェックする（ステップS224）。このチェックの結果、近距離無線通信部113が撮影許可の通知を受信したと判断すると（ステップS224でYes）、制御部117は、サーバ213から無線送信される、絵画215等の撮影許可に対する課金情報と、料金支払のための手続要求とが近距離無線通信部113によって受

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信されたか否かをチェックする（ステップS 2 2 5）。このチェックの結果、近距離無線通信端末1 1 3が課金情報、及び料金支払のための手続要求を受信したと判断すると（ステップS 2 2 5でY e s）、制御部1 1 7は、ユーザが料金支払のための所定の手続を終了したか否かをチェックする。ここで、料金支払のための所定の手続の例としては、ユーザが所持するクレジットカードのカード番号、或いはユーザの銀行口座の口座番号等の情報を、携帯通信端末1 0 3を用いてサーバ2 1 3に通知する処理が挙げられる（ステップS 2 2 6）。

#### 【0 0 8 7】

このチェックの結果、上記所定の手続が終了したと判断すると（ステップS 2 2 6でY e s）、制御部1 1 7は、サーバ2 1 3から無線送信される撮影制限の一部解除通知が近距離無線通信部1 1 3によって受信されたか否かをチェックする。因みに、この撮影制限の一部解除通知とは、特定の絵画2 1 5等の美術作品の撮影を可能にした旨の通知である（ステップS 2 2 7）。このチェックの結果、近距離無線通信部1 1 3が上記撮影制限の一部解除通知を受信したと判断すると（ステップS 2 2 7でY e s）、CCDカメラ1 0 7による特定の美術作品の撮影動作が開始される（ステップS 2 2 8）。

#### 【0 0 8 8】

次に、携帯通信端末1 0 3において、上記編集・転送用プログラムを起動して、上記撮影した美術作品の画像情報を絵葉書用に編集する（ステップS 2 2 9）。そして、絵葉書用に編集した美術作品の画像情報を、後でプリントアウトする処理を行うか（ステップS 2 3 0）、或いは他の携帯通信端末1 0 3に転送する処理を行った後（ステップS 2 3 1）、一連の処理動作を終了する。なお、携帯通信端末1 0 3を携行したユーザの現在位置が、美術館2 1 1内の撮影制限区域の外であれば、近距離無線通信部1 1 3は、図1で示したような撮影制限情報送信装置1 0 1からの撮影制限情報を受信することがない（ステップS 2 2 1でY e s）。そのため、制御部1 1 7は、CCDカメラ1 0 7が撮影制限無しの場合の撮影が実行可能なように、CCDカメラ1 0 7を制御する（ステップS 2 3 2）。なお、図11、及び図12に示したシステムでは、CCDカメラ1 0 7を内蔵した携帯通信端末1 0 3を用いることとして説明したが、携帯通信端末1 0 3に代えてデジタルビデオカメラを用いることとしても、上記と同様の処理動作が可能である。

#### 【0 0 8 9】

以上、本発明の好適な実施形態を説明したが、これらは本発明の説明のための例示であって、本発明の範囲をこれらの実施形態にのみ限定する趣旨ではない。本発明は、他の種々の形態でも実施することが可能である。例えば、図11で示した撮影制限解除システムについてみれば、以下のような応用例も想定し得る。

#### 【0 0 9 0】

即ち、上記撮影制限解除システムは、奈良、京都、鎌倉等の観光地における著名な神社や仏閣などの撮影制限を受けている施設内部における撮影を例外的に許可するような場合などにも適用可能である。

#### 【0 0 9 1】

この場合、拝観料を予め幾分値下げしておいて、内部の撮影を所望するユーザに対して、撮影制限を部分的に解除する毎に課金するようにしたり、或いは、リピータを増やすために、拝観料は値下げせずに、撮影制限を部分的に解除する毎にクーポンを発行して、クーポンの発行点数に応じて次回の入場に際しての拝観料を値引きするようなサービスを提供することも可能である。また、上記施設において、ユーザが料金を追加して支払うことにより、それら施設に係るテキストデータがそれら施設のサーバから携帯通信端末1 0 3に転送されるようなサービスを提供することも可能である。なお、ユーザが携帯通信端末1 0 3により上記神社や仏閣内を撮影するとき、これらの施設内に配置されているサーバから種々のコマース（画像）情報を流すようにすれば、これら施設の管理主体が、広告を依頼する企業などから広告料収入を得ることができる。

#### 【0 0 9 2】

また、著名な観光地や、有名な遊園地等の娯楽施設において、所定の料金を支払うと、そ

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れら施設における写真撮影に最適なスポットを教示するメッセージを携帯通信端末103を通じてユーザに報知して、ユーザが携帯通信端末103を用いて撮影した該スポットの背景画像に、ユーザ本人の顔写真を合成した画像を提供するようなサービスにも、図11で示したシステムを応用することが可能である。この場合、別のユーザの携帯通信端末103に対して、自分の顔写真と特定のスポットとの合成写真の画像を送信すれば、ユーザの現在位置を、別のユーザに通知することができる。更には、ユーザが、携帯通信端末103を用いて或る駅で撮影すると、該駅における時刻表等の付属情報が有料で携帯通信端末103に転送されるようなサービスにも、図11で示したシステムを応用することが可能である。

#### 【0093】

なお、上述した課金に関する処理については、携帯通信端末103から撮影を行った旨の通知を移動体通信網を介して電話局側に伝送して、電話局側で課金処理するようにしても良い。

#### 【0094】

##### 【発明の効果】

以上説明したように、本発明によれば、撮影装置又は撮影手段を有する携帯端末において、撮影制限区域内での撮影制限が確実にに行えるようにすることができる。

#### 【0095】

また、本発明によれば、撮影装置又は撮影手段を有する携帯端末において、撮影対象とされる人物の撮影を行う場合に、被撮影者を始めとする周囲への報知が確実にに行えるようにすることにより、被撮影者本人の知らない間に盗撮されないようにすることができる。

##### 【図面の簡単な説明】

【図1】本発明に従う撮影制限システムの第1の実施形態を示すブロック図。

【図2】本発明に従う撮影制限システムの第2の実施形態を示すブロック図。

【図3】本発明に従う撮影制限システムの第3の実施形態を示すブロック図。

【図4】図3に記載の撮影制限システムにおける各部の処理動作を示すフローチャート。

【図5】本発明に従う撮影警告システムの一実施形態を示すブロック図。

【図6】本発明に従う撮影制限システムを、野外における無条件の撮影を規制すべき場所に適用した一例を示す説明図。

【図7】本発明に従う撮影制限システムを、野外における無条件の撮影を規制すべき場所に適用した別の例を示す説明図。

【図8】図7に記載の撮影制限システムにおける各部の処理動作を示すフローチャート。

【図9】本発明に従う携帯通信端末を用いたコマーシャル情報提供システムの一例を示す説明図。

【図10】図9に記載のコマーシャル情報提供システムにおける各部の処理動作を示すフローチャート。

【図11】本発明に従う携帯通信端末を用いた撮影制限解除システムの一例を示す説明図。

【図12】図11に記載の撮影制限解除システムにおける各部の処理動作を示すフローチャート。

##### 【符号の説明】

101、123 撮影制限情報送信装置

103 携帯通信端末

105 被撮影物体

107 デジタルカメラ（CCDカメラ）

109 通信部

111、127 メモリ

113 近距離無線通信部

115 表示部

117、131 制御部

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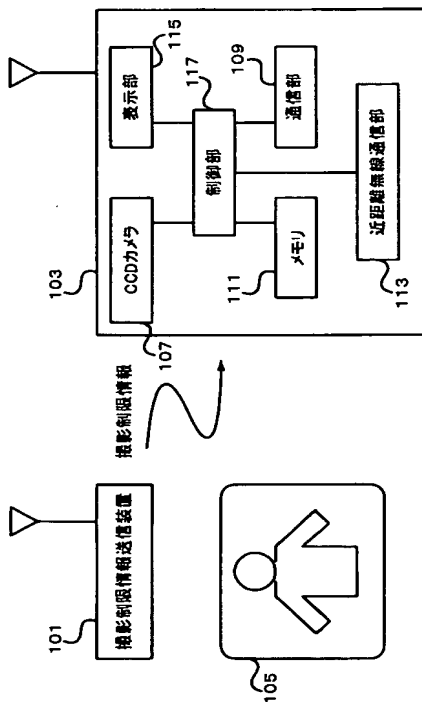
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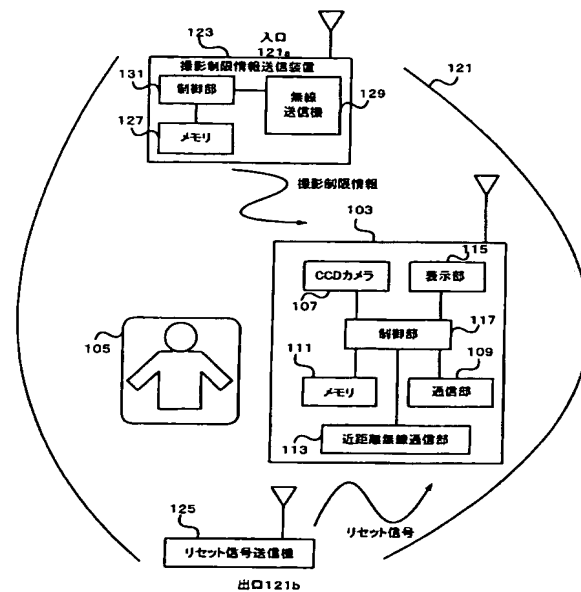
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- 1 2 1 撮影禁止エリア
- 1 2 1 a 撮影禁止エリアの入口
- 1 2 9 無線送信機
- 1 3 3 撮影制限内容変更情報送信装置
- 1 5 3 (デジタルカメラを内蔵していない) 携帯通信端末

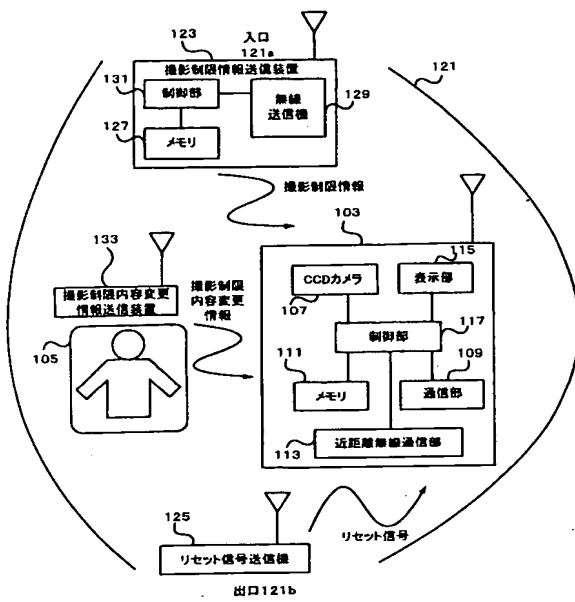
【図 1】



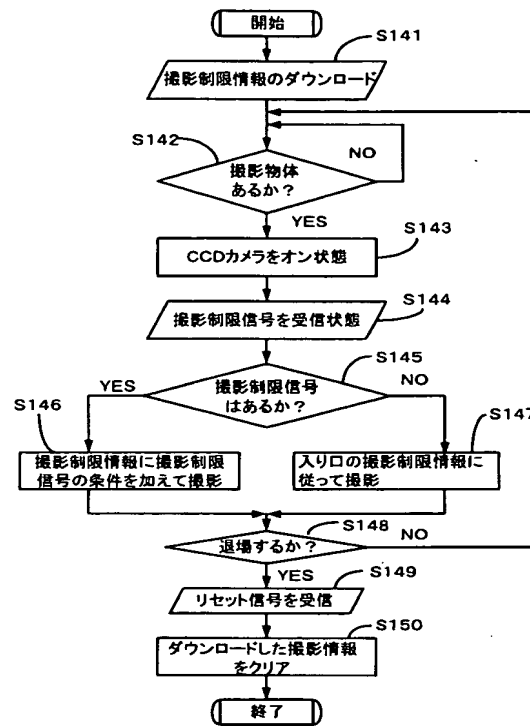
【図 2】



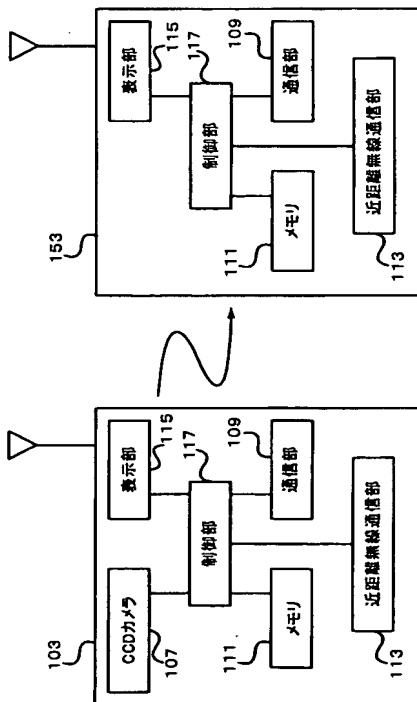
【図 3】



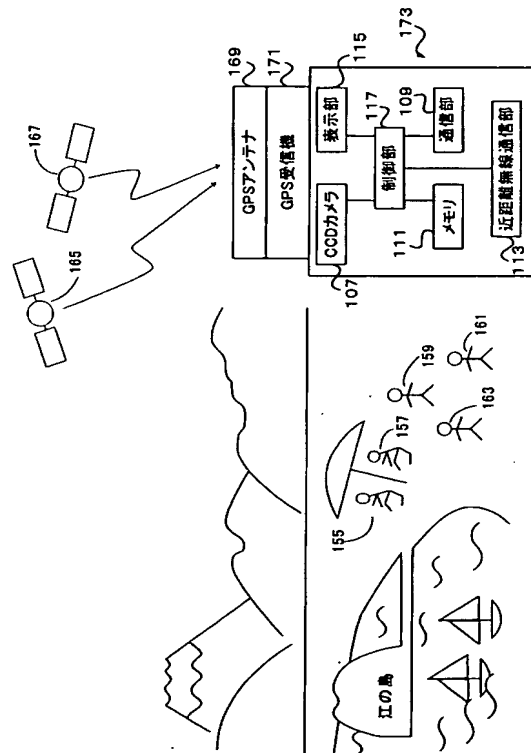
【図 4】



【図 5】

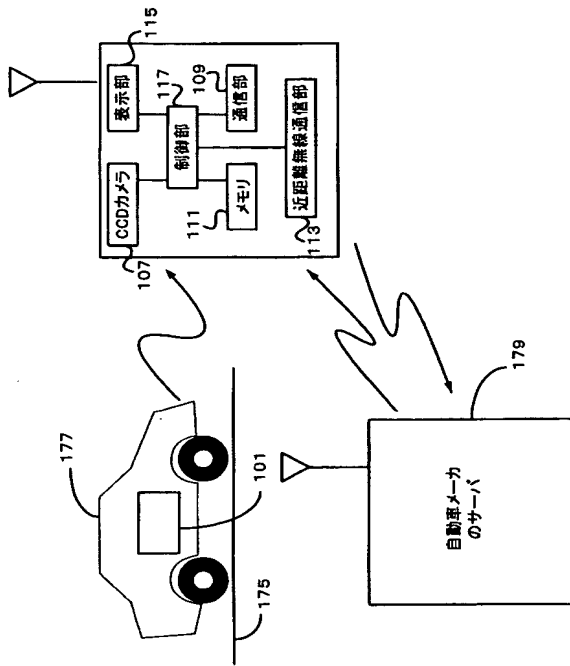


【図 6】

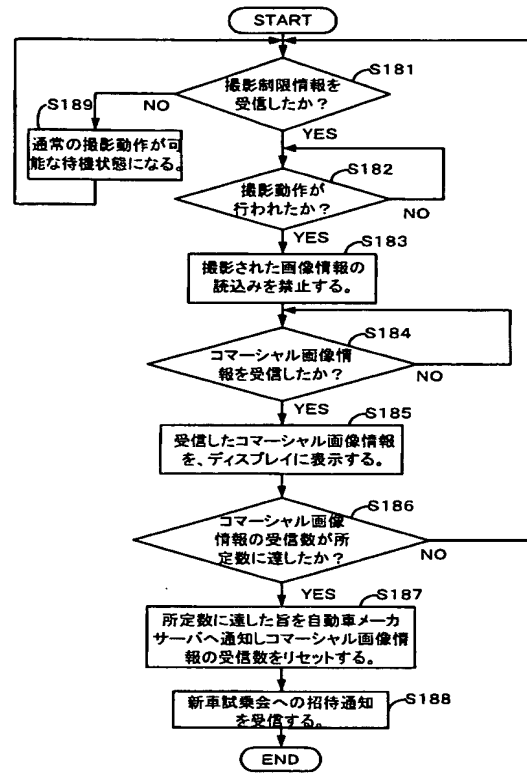




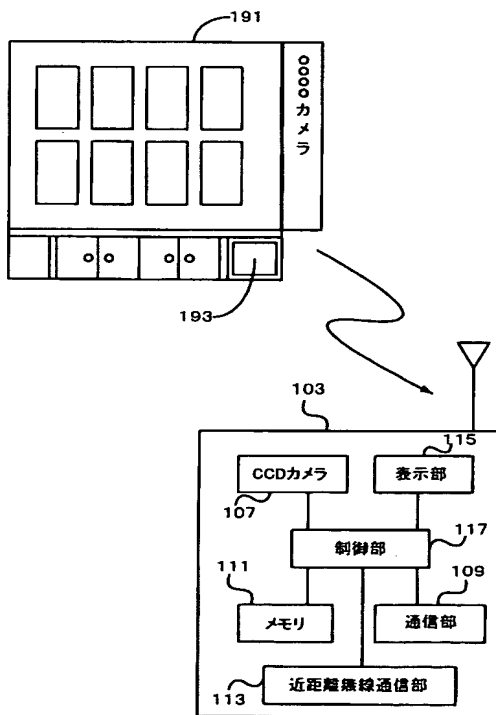
【図 7】



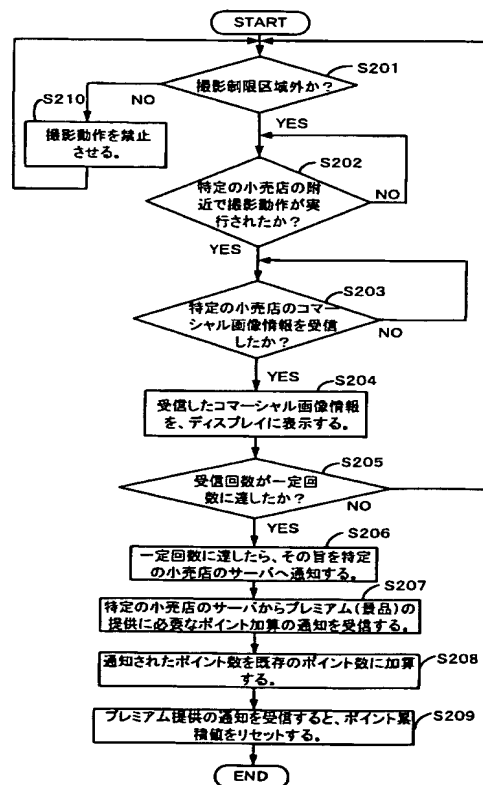
【図 8】



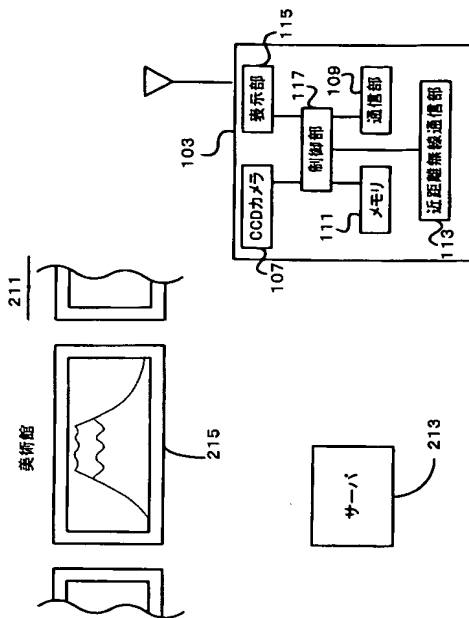
【図 9】



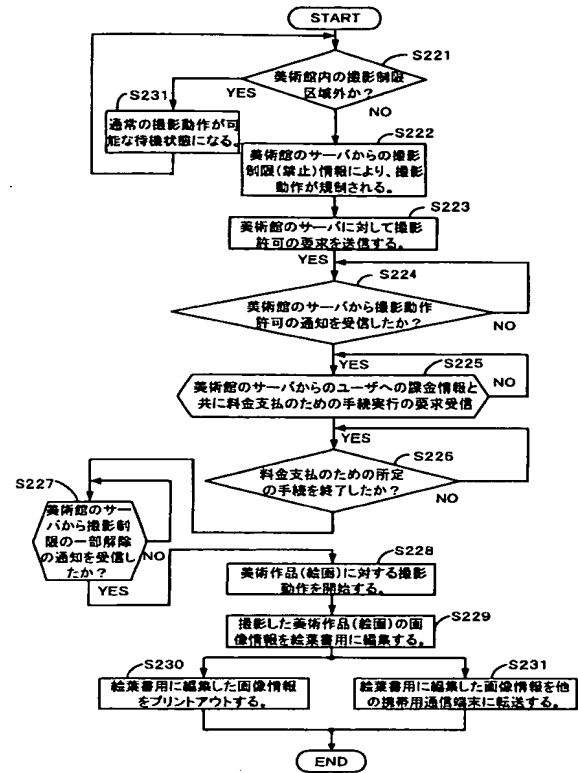
【図 10】



【図 11】



【図 12】



フロントページの続き

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